

VOL. XXV. No. 9

SEPT., 1904

# THE CALIFORNIA MEDICAL JOURNAL

PUBLISHED MONTHLY BY THE CALIFORNIA MEDICAL ASSOCIATION, SAN FRANCISCO, CAL.



## VACCINE

### ANTITYPHOID VACCINE

For the treatment of typhoid fever. It is a vaccine prepared from the typhoid bacillus, and is the only vaccine of its kind.

### ANTITYPHOID VACCINE

For the treatment of typhoid fever. It is a vaccine prepared from the typhoid bacillus, and is the only vaccine of its kind.

### ANTISYPHILITIC VACCINE

For the treatment of syphilis. It is a vaccine prepared from the syphilitic bacillus, and is the only vaccine of its kind.

### ANTIGONORRHOIC VACCINE

For the treatment of gonorrhea. It is a vaccine prepared from the gonorrheic bacillus, and is the only vaccine of its kind.

**PARKER, DAVIS & CO.**

HOME OFFICE AND LABORATORIES, DETROIT, MICH.







# PROGRESS IN MEDICINE

There must be changes or medical science will stand still. Old things must give way to new—old ideas must be modified. Cod liver oil was first used just as it came from the fish, of dark color and strong odor. Later the oil was refined. After a time the oil was emulsified, which rendered it more palatable. That was a step in advance. At a more recent date came

FORMULA  
ON EVERY  
BOTTLE

NEVER  
SOLD IN  
BULK

## *Hagee's Cordial of Cod Liver Oil Comp.*

containing **all** the active principles of the best cod liver oil with hypophosphites lime and soda in the form of a thin fluid **Cordial**—perfectly palatable, free from grease and fishy flavor.

*Prescribe*

**CORD. OL. MORRHUAE COMP. (Hagee)**

*and your patients will take it*

**Katharmon Chemical Co. St. Louis, Mo.**

**DR. SHILEY'S**

**COMBINED SERUMS FOR TUBERCULOSIS**

and Wasting Diseases

**SOLD ONLY TO PHYSICIANS.**

We are the Sole Manufacturers of these serums and they can be obtained only from us direct.

Formula on the bottle.

Clinical Memoranda on application.

**THE MERRELL-HALL CO.,**

MANUFACTURING CHEMISTS,

CHICAGO, ILL.



Retake of Pr



# PROGRESS IN MEDICINE

There must be changes or medical science will stand still. Old things must give way to new—old ideas must be modified. Cod liver oil was first used just as it came from the fish, of dark color and strong odor. Later the oil was refined. After a time the oil was emulsified, which rendered it more palatable. That was a step in advance. At a more recent date came

FORMULA  
ON EVERY  
BOTTLE

NEVER  
SOLD IN  
BULK

*Hagee's Cordial of Cod Liver Oil Comp.*

containing **all** the active principles of the best cod liver oil with hypophosphites lime and soda in the form of a thin fluid **Cordial**—perfectly palatable, free from grease and fishy flavor.

*Prescribe*

**CORD. OL. MORRHUAE COMP. (Hagee)**

*and your patients will take it*

**Katharmon Chemical Co. St. Louis, Mo.**

**DR. SHILEY'S**

**COMBINED SERUMS FOR TUBERCULOSIS**

**and Wasting Diseases**

**SOLD ONLY TO PHYSICIANS.**

We are the Sole Manufacturers of these serums and they can be obtained only from us direct.

Formula on the bottle.

Clinical Memoranda on application.

**THE MERRELL-HALL CO.,**

MANUFACTURING CHEMISTS,

CHICAGO, ILL.

Preceding Frame





Ladies' Department  
with Lady Attendant

**Wm. Hatteroth**  
**Surgical Instruments**

Importer and Manufacturer of  
Trusses, Elastic Hosiery, Electric Batteries,  
Apparatus for Deformities,  
Physicians' and Hospital Supplies.

224 Sutter Street  
ABOVE KEARNY STREET  
SAN FRANCISCO, CAL.  
Telephone, Main 1748

---

## THE BEST OFFER EVER MADE BY A MEDICAL JOURNAL

The OKLAOMA MEDICAL NEWS-JOURNAL is giving to every new subscriber  
as a present



### A 14-K GOLD FOUNTAIN PEN

This is one of the best Journals of the South West, and is the Official Organ  
of the Oklahoma and Indian Territory Eclectic Medical Society.

Send \$1.00 today for your Subscription for 1904, and receive this gold fountain pen by return mail. Address—

Oklahoma Medical News-Journal,  
Oklahoma City, Okla.



FOR ENTERO-COLITIS  
FOR ERYSIPELAS  
FOR FELONS  
FOR INFLAMED GLANDS  
FOR PLEURISY  
FOR PNEUMONIA  
FOR POISON IVY  
FOR POISON OAK  
FOR RHEUMATISM  
FOR SYNOVITIS  
FOR SPASMODIC CROUP  
FOR SPRAINS

AND

FOR ANY INFLAMMATORY DISEASE

REQUIRING LOCAL TREATMENT

USE

**ANTIPHLOGISTINE**

LIBERALLY

THE RESULTS WILL ALWAYS BE SATISFACTORY.

To insure economy and the best results always order a full package and specify the size required—Small, Medium, Large or Hospital Size.

**THE DENVER CHEMICAL MFG. CO.**  
NEW YORK.



# California Medical Journal.

The Largest Journal West of Chicago Devoted Entirely to Medicine and Surgery

D. Maclean, M. D., Editor

\$1.50 per Year, in Advance

Editorial and Press Rooms,  
1466 Folsom Street, San Francisco, Cal.

Published Monthly in the Interests of the  
California Medical College.

Editor's Hours, 10 to 12 Daily.

Entered at the San Francisco Post Office as Second-Class Matter.

## Contents.

ORIGINAL AND SELECTED

PAGE

EFFECT OF HYGIENE IN CONTAGIOUS DISEASES....	M. Schirman, M. D.	253
ANSWER TO DR. A. J. ATKINS' NEW DISCOVERY..	F. G. De Stone, M. D.	257
CEREBRO-SPINAL MENINGITIS.....	John Park Dougall, M. D.	263
MEXICAN USES OF DAMIANA.....	John Uri Lloyd.	264
EDITORIALS.....		267
EDITORIAL NOTES.....		268
THE COUNTY MEDICAL SOCIETY.....		269



Women suffering from an Aching Back,  
Bearing Down Abdominal Pains, or any  
abnormal condition of the Uterine system, should  
be given ALETRIS CORDIAL RIO in teaspoonful  
doses four times a day.

Rio Chemical Co., New York.



# BOVININE in ANÆMIA

**BOVININE** overcomes *Anæmia* logically, rationally and radically, for several substantial reasons:

1. Because it supplies the starving organism with the requisites for immediate reparation.
2. Because it needs no preparation or transformation at the hands of the vital machinery before it can be assimilated and converted into living force.
3. Because *Anæmia* results from a form of malnutrition caused by the absolute inertia of the digestive function.

**BOVININE** comes to the rescue by supplying a vitalized and perfectly compounded pabulum that calls for no chemico-vital effort whatever.

Apply the crucial test—clinical use—at our expense, and convince yourself that our claims are neither extravagant nor exaggerated, but are strictly based on science.

**The Bovinine Company**  
75 West Houston Street, NEW YORK

## ANTIKAMNIA PREPARATIONS

### ANTIKAMNIA & SALOL TABLETS

*Hare* says "Salol renders the intestinal canal antiseptic and is the most valued drug in intestinal affections." The anodyne properties of Antikamnia in connection with Salol render this tablet very useful in Dysentery, Indigestion, Cholera Morbus, Diarrhoea, Colic, and all conditions due to intestinal fermentation.

### LAXATIVE ANTIKAMNIA & QUININE TABLETS

To reduce fever, quiet pain, and at the same time administer a gentle tonic-laxative is to accomplish a great deal with a single tablet. Among the many diseases and affections which call for such a combination, we might mention La Grippe, Influenza, Coryza, Coughs and Colds, Chills and Fever, Biliousness, Dengue and Malaria with its general discomfort and great debility.

### ANTIKAMNIA & CODEINE TABLETS

Especially useful in Dysmenorrhœa, Utero-Ovarian Pain, and pain in general caused by suppressed or irregular menses. This tablet controls the pains of these disorders in the shortest time and by the most natural and economic method. The synergetic action of these drugs is *ideal*, for not only are their sedative and analgesic properties unsurpassed, but they are followed by no unpleasant effects. The efficacy of this tablet in neuroses of the larynx is well known.

**THE ANTIKAMNIA CHEMICAL COMPANY**

ST. LOUIS, U. S. A.



# LIBRADOL.

## The Season for Insect Stings and Bites is at hand.

It has been brought to our attention through numerous reports that Libradol is a quick reliever of bites and stings of insects, and we ourselves witnessed in two instances its marvelous power in the instantaneous relief of the pain of bee stings. In this connection, the following letter from Dr. Albert Saylor will prove of value, to physicians who may be confronted with a painful sting or insect bite.

"About the middle of October, 1903, immediately after the fall, or aster flow of honey, in closing up for winter the bee hives of my apiary, I was stung on my hands and wrists, at least fifty times, and most likely, seventy-five times.

"I applied Lloyd's Libradol once, during my closing up bee work, and twice afterwards. The swelling stopped at once, as if by magic, with scarcely any after-puffiness, disagreeableness, or discomfort.

"About a week ago, working without my bee veil, one little nettlesome rascal dabbed me on the nose, and while the pain was yet severe, I ran for my box of Lloyd's Libradol, and applied the remedy, thinking to note from time to time its effect. But just like a small boy, I forgot all about the sting for at least three days.

"Nothing else as yet developed compares with Libradol for dulling the pain and reducing the swelling of bee stings."

Respectfully,

ALBERT SAYLER, M. D.,  
New Palestine, Clermont Co., Ohio.

In this connection it is well to bear in mind that Libradol need not be plastered thickly where a large surface is involved, but that a thinly spread tissue is satisfactory, or it may even be rubbed on the skin with the finger. Please bear in mind that Libradol instantly relieves itching of a surface, and is especially applicable to chronic itching of the anus.

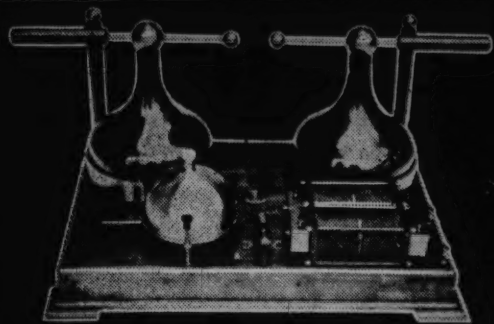
Price, 1-lb. package.....	\$1.50	By mail, \$1.75
" 1/4-lb. " .....	.45	" .55

June 1, 1904.

LLOYD BROTHERS, Cincinnati, Ohio.



## Kinraide Coils



FOR **X-RAY-  
HIGH FREQUENCY-  
ULTRA VIOLET WORK**

Short Exposure — Immense  
Output — Steadiness of Ray —  
No Breakdown — Unaffected by  
Weather — Easily Carried — Con-  
nects to Any Electric Lamp Socket

**Prices Greatly Reduced**

Send for Catalogue No. G

**SWETT & LEWIS COMPANY**  
18 Boylston Street, Boston, Mass.

### To Prevent Draw Sheets from Wrinkling.

A correspondent writes to the London *Hospital* as follows: To nurses in charge of bed-ridden and helpless patients, I beg to offer a suggestion for preventing draw-sheets from wrinkling. Have your draw-sheets slightly wider than the mattress, with a wide hem on either side through which run a firm wooden lath, such as is commonly used for window blinds. These laths have holes bored in them at each end, with corresponding button holes in the hem of the sheet. Pass through the holes strings of stout tape, and tie firmly to the bedstead. Of course the sheet must be placed under the patient in the usual way before inserting the laths. Draw-sheets treated in this way will remain smooth much longer than they can do by merely tucking in.—*New York Medical Journal*.



## GLYCO- THYMOLINE

FOR  
**SUMMER COMPLAINTS**

**PROPHY LAXIS**—The very nature of artificial foods and cow's milk predisposes to their rapid decomposition. A few drops of Glyco-Thymoline added to each feeding corrects acidity and prevents disorders of stomach and intestines.

**TREATMENT**—As an adjunct to your treatment of summer complaints, Glyco-Thymoline used internally and by enema corrects hyper-acid conditions, stops excessive fermentation and prevents auto intoxication. It is soothing—alkaline—nontoxic.

**KRESS & OWEN COMPANY,**  
210 Fulton Street, New York.



**PAPINE** IS THE  
 ANODYNE PRINCIPLE OF OPIUM, THE  
 NARCOTIC AND CONVULSIVE ELEMENTS  
 BEING ELIMINATED, AND IS DERIVED  
 FROM THE CONCRETE JUICE OF THE  
 UNRIPE CAPSULES OF PAPAVER SOM-  
 NIFERUM. ONE FLUID DRACHM IS EQUAL  
 IN ANODYNE POWER TO ONE-EIGHTH  
 GRAIN OF MORPHIA. IT PRODUCES NO  
 TISSUE CHANGES, NO CEREBRAL EX-  
 CITEMENT, NO INTERFERENCE WITH  
 DIGESTION.

**BROMIDIA ECTHOL IODIA**

**BATTLE & CO.,** CHEMISTS  
CORPORATION, **ST. LOUIS, MO., U.S.A.**

**CACTINA PILLETS**  
 Has many Advantages over  
 Other Heart Stimulants.  
 Dose: One to four pillets three times a day,  
 Each pillet represents one one-hundredth of  
 a grain CACTINA, the active prox-  
 imate principle of CEREUS GRANDI-  
 FLORA.

**SENG INDIGESTION.**  
 Promotes Normal Digestion by Encouraging the Flow of Digestive  
 Fluids. A Most Successful Treatment for  
 DOSE: One to two teaspoonfuls three times a day.  
 LITERATURE TO PHYSICIANS.  
 A Palatable Preparation of  
 PANAX SCHINSENG in an  
 Aromatic Essence.  
**SULTAN DRUG CO., ST. LOUIS.**

**PEACOCK'S BROMIDES**  
 THE PUREST FORM OF BROMIDES.  
 Each fluid drachm represents 15 grains of  
 the combined C. P. Bromides of Potassium,  
 Sodium, Calcium, Ammonium, and Lithium.  
 DOSE: one to three teaspoonfuls accord-  
 ing to the amount of Bromides required.  
 Does not produce bromism nor disturb  
 the stomach.

**CHIONIA** FROM **CHIONANTHUS VIRGINICA**  
 THE HEPATIC STIMULANT.  
 Re-establishes portal circulation without producing congestion.  
 Invaluable in all ailments due to hepatic torpor.  
 DOSE: one to two teaspoonfuls  
 three times a day.  
 LITERATURE TO  
 PHYSICIANS. **PEACOCK CHEMICAL CO., ST. LOUIS.**





# THE POWER <sup>OF</sup> THE BLOOD

is lost if the quality of the blood is poor. Build up the quality of the blood by increasing the amount of Hæmoglobin and the number of red corpuscles, and like the force of Niagara, the power of the blood to build new tissue and repair waste will be tremendous.

## Pepto Mangan ("Gude")

To assure proper filling  
of prescriptions, order  
Pepto-Mangan ("Gude")  
in original bottles  
containing  $\frac{7}{8}$  xi.  
It's never sold in bulk.

improves the quality of the blood rapidly and surely. Results are positive and can be proven by scientific tests.

PEPTO-MANGAN ("GUDE") is ready for quick absorption and rapid infusion into the circulating fluid and is consequently of marked and certain value in all forms of

**Anæmia, Chlorosis,  
Bright's Disease, Rachitis,  
Neurasthenia, &c.**

Samples and literature  
upon application.

**M. J. BREITENBACH COMPANY,**

LABORATORY,  
LEIPZIG, GERMANY.

53 Warren Street, NEW YORK.



## - Progressive - - Decline -

When a patient continues to fail, in spite of the specific and general medication that is being administered, add to your treatment Colden's Liquid Beef Tonic. You will shortly observe an increasing return of appetite, color, spirits, weight, strength and activity.

This is not a theory; it is a fact proven by years of use, and never yet disproved. Specify "Ext. carnis fl. Comp. (Colden)" and see that your druggist supplies it.

Literature mailed to physicians on request.

**THE CHARLES N. CRITTENTON CO.**

Sole Agents for the United States,

115-117 FULTON STREET, NEW YORK.

# *Dr. Deimel Underwear* (LINEN-MESH)

Insures freedom from Colds, Catarrh, La Grippe and Rheumatism.

The man who cannot sit in a draft without catching cold generally wears woolen undergarments. They keep the skin damp and colds are the result,

All Dr. Deimel Garments bear the Dr. Deimel name. For sale at best dealers everywhere. If your dealer cannot supply you, write to

## THE DEIMEL LINEN-MESH COMPANY

491 Broadway, New York.

San Francisco, 111 Montgomery St.	Washington, 1313 F Street, N. W.	Brooklyn, 510 Fulton St.	Baltimore, 110 W. Lexington St.	Montreal, 2202 St. Catherine St.
London, 83 Strand (Hotel Cecil).				

*Dr. Deimel Linen-Mesh Supporters, Suspensories, etc., are made and sold exclusively by*

**J. ELLWOOD LEE Co., Conshohocken, Pa.**



# CALIFORNIA MEDICAL JOURNAL.

VOL. XXV.

SEPTEMBER, 1904.

No. 9.

## The Effect of Hygiene in Contagious Diseases.

M. SCHIRMAN, M. D.

Los Angeles, May 24, 1904.

Mr. President and Colleagues:

The title of my paper is "The Effect of Hygiene in Contagious Diseases," and although the subject is a very lengthy one, I have tried to treat it in as brief a manner as possible and still include the most important points.

The subject of contagious diseases is of the greatest importance in relation to preventive medicine, because in this large class of dangerous maladies it is possible, by the exertion of sufficient care according to hygienic principles, to preserve entirely the health and life from their power.

If we look back into the history of epidemics, we find that in the year 542 the bubonic plague began to spread from Lower Egypt to Northern Africa, Syria, Palestine and Europe. The disease prevailed about half a century and produced the greatest devastation wherever it appeared. Cities were de-

vastated the country converted into a desert, and the wild beast found an asylum in the abandoned haunts of man. About the middle of the fourteenth century the bubonic plague made a second incursion into Europe from its home in the East. According to authorities, in 1359, between March and July following, about 100,000 souls perished in the city of Florence. Hecker estimated that during its continuance from 1347 to 1351, 25,000,000—one-fourth of the probable total population of Europe—died. In various cities the mortality was: London 100,000, Paris, 50,000, Venice, 1,000,000, Marseilles 16,000, in one month.

The moral effects of this great pandemic of the plague were hardly less deplorable than the physical. The 15th and 16th Centuries had the plague generally diffused throughout Europe. The great epidemic in London occurred in 1665. The almost universal susceptibility to small-pox caused widespread



devastation wherever it appeared previous to the introduction of vaccination.

Asiatic Cholera: This disease caused the death of three-fourths of a million of human beings where it is endemic within the space of five years. Yellow fever, Scarlet fever, Diphtheria have all done their share in the destruction of the human race.

Most of these specific contagious diseases are peculiar to man, whilst animals on their part are infected by a whole brood of communicable maladies.

With regard to the co-operative effects of fermentation, putrescence or decomposition, there is some reason to believe that it may quicken the activity or facilitate the development of specific morbid poisons in the way of a predisposing cause to their production and an epidemic may be the result.

In order to make the sanitary precautions thus rendered advisable clearly understood, it should be explained in the first place that the germ theory of disease professes to account for the phenomena of small-pox, typhoid fever, yellow fever, relapsing fever, scarlatina, diphtheria, erysipelas, etc., etc., by attributing them to the more or less mechanical irritation, obstruction and other disturbances set up by masses of spores and mycelial threads developing in the blood and in the affected tissues.

The period of incubation is supposed to correspond with that required for germination of these spores. The gradual increment of the symptoms is attributed to the progressive growth of the millions of minute fungoid plants, whose period of greatest luxuriance

marks the acme of the attack, and the death and destruction of which correspond to the decline of the disease. The contagiousness of the communicable maladies is accounted for by the existence of the immense number of spores forming the true seeds of disease constantly produced, evolved from the affected individual and carried through the air of a room or house either alone or attached to some of the innumerable epithelial cells, which are being rubbed off by millions from the surface of human bodies.

Hence, according to this doctrine, contagious diseases are conveyed from one person to another by the transplanting of microscopically visible spores or seeds which have a separate vitality of their own, each after its kind, and which are to be escaped just as one would escape hordes of animals or swarms of insect pests by shutting them out or killing them before they can succeed in fastening upon human bodies.

As having an important bearing upon the hygienic precautions instituted, great benefit would probably result from its being understood by every man, woman and child, that the contagion of small-pox, scarlet fever, typhoid fever, yellow fever, measles, diphtheria, cholera, and so on, is composed of exceedingly minute spores or seeds so small that 25,000 of them placed end to end would measure less than one inch in length, each one of these 25,000 of seeds is capable, under favorable circumstances, of reproducing its kind with almost inconceivable rapidity; so that supposing, for example, the zygo-



desmus of Prof. Letzerich is really the morbid agent causing diphtheria, a particle of the grayish, false membrane of the size of the dot just mentioned, would contain separate seeds enough to infest every inhabitant of the United States with diphtheria. But whilst this is the theoretical possibility, practically the same law of the prodigality of Nature, exemplified in the spawn of the herring and salmon, holds good, and not more than one spore in a thousand, a million or a hundred millions, perhaps, has an opportunity to reproduce its species.

As there is no doubt that the contagion of the diseases just enumerated may penetrate into our system by the air that is breathed, the food that is eaten, and especially the water that is drunk, it is obvious that only the most scrupulous care can save us from these extremely minute seeds or insure their destruction after entrance into our bodies has been accomplished.

The recommendation of the sanitarians, therefore, is that every effort should be made, first, to prevent these morbid germs from being let loose upon the world, and second, when they have made their escape into the free air or water, to destroy all spores likely to come in contact with unprotected person—that is to say, human beings from whose bodies one crop of small-pox fungus, yellow fever bacteria, relapsing fever spirilla and so forth has not already been raised. Each individual affected with small-pox, scarlet fever, diphtheria, or any other of the diseases just mentioned is, according to this theory, to be looked upon as a sort

of hot bed or forcing house for the seeds or spores of that malady. From his or her body are continually given off in all directions by the skin, the breath, the perspiration and other secretions, millions of spores of the extreme minuteness just described, each one of which, if it were received into a human system, after a few days or weeks (to what is known as the period of incubation) give rise to a new case of the disease, again a new hot bed of contagion for other unprotected organism.

Now, these spores, just like the seeds of larger noxious weeds, which when allowed to gain a foothold in the fields and gardens, propagate themselves with such immense rapidity, have no power to move of their own accord and can only develop if they meet with air, moisture and congenial soil suited to their peculiar requirements—that is, if a small-pox patient is shut up in an air tight room so that the seeds cannot escape, or if, whilst in the open air that air is stagnant so that no seeds are wafted away from the immediate neighborhood of the individual; or if when carried along by the wind they are blown away from any human habitation or are desiccated in a dry atmosphere, baked by the sun's rays or artificial heat, in other words, if they do not fall upon good ground all this wealth of provision by which nature tries so hard to secure the perpetuation of the poisonous plant causing small-pox in our system becomes unavailing and her malevolent design against our race carried out with such a prodigality of murderous weapons utterly fails.



Hence, in the ordinary affairs of life, unless special precautions are resorted to, ways are open for the spread of these microscopic agents of propagation in a thousand unseen modes. In all instances of contagious diseases the isolation from unprotected persons carried out with every due consideration and kindness is therefore to be practiced, and under other conditions means which will destroy the life of the spores such as dry heat of high degree, super-heated steam, prolonged boiling in water, caustic acids or alkalis are to be used with a firm confidence that if they are employed thoroughly enough they will absolutely put a stop to all spread of the disease.

A very important suggestion in regard to the use of disinfectants arising from our knowledge of the germ theory is, that doubtless the germs float in the atmosphere as do the seeds of the thistle and dandelion, and are no more susceptible to the action of chemicals with which the air containing them is impregnated, it is useless to expect a certain result from the milder disinfectants as usually employed by scenting the medium in which the disease germs are suspended, with carbolic acid, camphor, acetic acid and similar non-corrosive agents.

As to the lesson we may deduce from the teaching in regard to public hygiene, its importance is only surpassed by its simplicity. For such contagious and infectious maladies it is: Avoid at any cost the entrance into the communities of living spores or seeds of disease. And this should be insured, not as in former times, with mere hope that

somehow we might escape the visitation, but with the absolute certainty that, with proper care, infection can not occur.

No doubt many Americans have smiled at the story of certain terror-stricken authorities in a German town who, when a single potato-bug was discovered in a field near them, immediately covered the whole plantation with straw soaked in kerosene, and setting fire to it destroyed every vestige of animal and vegetable life for acres around. And yet if we consider a moment we must realize the fact that this apparent waste of time, trouble and potato vines was the wisest and most economical expenditure that could possibly have been made.

Quarantine, disinfection and prolonged detention of persons with disinfection or frequently total destruction of goods from infected districts, is apparently the right of the many at the expense of the few; and even if, as many would advocate for the sake of strict justice, ample compensation for loss of time and loss of property were allowed by law to those who suffered, the community at large would doubtless be tenfold better off pecuniarily, to say nothing of the far more important saving of human life and human suffering which would be secured.

In conclusion I will say hygiene has done much in aborting and preventing the spread of contagious diseases. With absolute cleanliness, with isolation, with the introduction of pure air into the apartments and with proper disinfectants, we have the best safeguards against epidemics.



**Answer to Dr. A. J. Atkins' Paper on "Electrical Physiology, or Electro-Chemic Energy vs. Oxygenation of the Human Blood."**

F. G. DE STONE, M.D.

ANSWER to a paper widely circulated by Dr. Albert J. Atkins and claimed as a discovery, the caption of his article being "Electrical Physiology, or Electro-Chemic Energy vs. Oxygenation of the Human Blood."

One year ago this article we are about to discuss, was read before the State Medical Society. As no one has answered his statements, and as Dr. Atkins still persists in putting his revamped theory before the public, I think it is time that some one answers his fallacies.

To begin with, Dods advanced the theory of Electricity as the source of life nearly a hundred years ago. He affirmed that it was the source of life, the cause of the circulation, and the means by which the mind operated upon the body to cause it to perform its functions. His theories were ridiculed at the time, though he did advance good arguments which have never been controverted; and the only argument in this article we are discussing is that made in support of the statements made by him.

There are many who will read this answer who can remember when the question as to whether electricity and nerve force are the same, was a topic much discussed. Later, Loeb and his colleagues have advanced practically the same theory as Dods' and admitted

that electricity and nerve force are the same. Therefore I fail to see where there is any originality in this arrangement of words by Dr. Atkins.

The assertion first made in his article is, that there is no such thing as osmosis of oxygen into the blood; in support of this claim he makes a quotation entirely foreign to the subject, but I will quote his own words and take up seriatim his statements.

Quotation 1.—"I have concluded that oxygen does not pass into the blood by osmosis \* \* \* although the theory of osmosis has been generally received it has not been proved." This is his first proposition; he then goes on to quote from Dalton's Ancient Physiology, as follows: "When we endeavor to learn the place and manner of oxidation in the living body the attempt fails. There is no evidence of such direct action taking place in the circulating fluid or in any of the organs or tissues. \* \* \* The blood collects or disseminates substances which have already been prepared in other parts, and as a general rule conveys them unchanged to their destination. Even a substance like pyrogallie acid, so readily oxidizable in an alkaline medium, that it is employed for the quantitative determination of oxygen in the air, when introduced into the animal system passes through it unchanged, and reap-



pears in the urine. There is no evidence that the blood exerts anywhere a direct oxidizing action."

You will note that this quotation has no bearing whatever upon the proposition he has undertaken to prove, even if it were true (which it is in the main), though there are other factors that might be discussed in connection with it that would show it up in a different light; but we are discussing the subject of osmosis and all I wish to show is, that this introduction of a statement ostensibly in support of his argument is entirely foreign to the subject, hence but a play on words, for osmosis and oxidation are entirely different processes.

Quotation 2.—"American Text Book of Physiology, page 537, says: "Most of the studies have been made by determination of the quantities of carbon dioxide given off in respiration, the results being taken as standards for the relative volume of oxygen absorbed; but such deductions are of very uncertain value, and may be entirely misleading."

You will note also in this quotation that it is not made with reference to whether oxygen is taken in by osmosis—has no bearing as to the method of absorption, but has reference only as to the quantity taken in as gauged by the amount of carbon dioxide given off. Stating merely that this may be an unreliable method of estimating how much oxygen is taken in.

Therefore there is no argument in either of these quotations bearing on the claim that oxygen is not absorbed by the lungs.

He next states of the respiration, that in the lungs the circulation of blood comes in contact with the circulation of air, and chemical elements are brought together which, under the influence of heat, unite and generate electro-chemic energy.

This one statement covers the whole ground and makes the rest of the paper utterly ridiculous, for how do these two circulations come together to generate this energy without passing through the partition?

Dods claimed that electricity is the primal ether, and we breathe electricity with air into the lungs, and it is there attracted to the hæmoglobin of the blood which contains iron, and in rushing to the red corpuscle it carries oxygen with it. Dods says: "Air is computed to consist of twenty-one parts oxygen and seventy-nine parts of nitrogen. Electricity as an universal agent pervades the entire atmosphere. We cannot turn the electric machine in any dry spot on earth without collecting it. Oxygen is that element which sustains life and flame; neither can exist a moment without it; while nitrogen on the contrary just as suddenly extinguishes both. The atmosphere in this compound state is taken into the lungs. The oxygen and electricity having a strong affinity for moisture, instantly rushes to the blood, while the nitrogen is disengaged and expired, etc. This shows the source from which electro-chemic energy was obtained."

The next proposition reads as follows: "It is questionable whether carbon and oxygen reach the blood by osmosis nor do they unite while circu-



lating in the blood, but that he will show they enter the blood through the route of digestion.

If the Doctor will turn to page 236, 237, Landois and Sterling, he will be able to understand how this process is carried on.

Landois says: "Carbon dioxide is in chemical combination with the salts and plasma of the blood; while oxygen is contained in the hæmoglobin of the red corpuscles; thus while these elements are held under a certain amount of pressure within the vessels they remain loosely in combination, but when this pressure is lessened they dissociate or fall apart. For example, when calcium carbonate is heated to 440° centigrade, carbon dioxide is given off from its state of chemical combination, but is taken up again and a chemical compound formed, which is changed to chalk when it cools."

If I mix sodium with carbonic acid and water, I make a combination that has an unstable equilibrium; hence, we put soda water in strong bottles under heavy pressure; now, if this same soda water was put into a cylinder much too large for it, and this cylinder had a piston in it, after the gas had separated from the water sufficient pressure being applied to the piston it could be again made to combine with the water.

Landois—"If these compounds of oxygen and carbon dioxide are placed under conditions where the partial pressure is low, that is, in a medium containing a very low percentage of these gases, these compounds are dissociated or fall apart; that is, they give up oxygen or carbon dioxide. If after being

dissociated they are placed under conditions where, owing to the large amount of these gases present the partial pressure of oxygen or carbon dioxide is high, these gases are taken up again and enter into the condition of chemical combination."

This answers the statement that these elements are not in chemical combination in the blood; they may not, strictly speaking, be in a close chemical combination but they are held together by pressure.

The theory given above of dissociation of gases was advanced by Donders.

In the tissues of the body the carbon dioxide is being continually formed as a result of destructive metabolism (katabolic) and therefore the partial pressure for carbon dioxide in the tissues is high, hence it moves towards the blood stream, and oxygen is driven towards the tissues; when the blood reaches the lungs and is spread out over the extremely thin partition between it and the air (one-twenty-thousandth of an inch in thickness) it is met by the oxygen of the air at a pressure of sixteen pounds to the square inch; this pressure causes the oxygen to rush to the blood while the carbon dioxide escapes, as there is less resistance for it to overcome towards the air cells. While this illustration is not technically correct it conveys to the mind something of what Donders meant to convey by dissociation of gases.

Bohr concluded that the separation of the carbon dioxide from the venous blood in the lungs and its passage into the air vesicles are not explicable



on the hypothesis of diffusion, but we must regard the carbon dioxide as removed from the blood by means of a kind of secretory process in the pulmonary tissues analagous to the secretory processes in glands. But even so, this is osmosis.

I have taken up the statements in this paper thus far to show the erroneous reasoning and illogical deductions made from quotations. I shall now give the statements of what is really taught by the best medical and chemical minds in the world, with the idea of showing that the Doctor has simply taken a statement of a popular opinion.

Has anyone ever seen a statement in any modern physiology that the means by which oxygen was taken into the body or carbon dioxide given off was other than a chemical process? Certainly they have not. The method by which they gain entrance into the body or come out, is, strictly speaking, a chemical process. But if they do so enter or escape, in the broad sense of the term, it must be by osmosis whether it be by a secretory, filtration or diffusion process.

The Doctor is simply fighting a battle in the air and making claim to discovery to which he has absolutely no right, for all the ground he claims to have covered, has been gone over time and again.

If anyone will take the trouble to turn to Yeo, Raymond, Howell, Foster, Burke, Chapman, Landois and Sterling, or any of a dozen other authors he will find that the following is the consensus of opinion as to how oxygen is taken into the blood.

1. The object of respiration is to supply the oxygen necessary for the oxidation processes that go on in the body, as well as to remove the carbon dioxide formed.

2. Concerning the absorption of oxygen from the air in the alveoli into the venous blood of the lung capillaries whereby the blood is arterialized it is proved that this is a chemical process.

The gas free hæmoglobin takes up oxygen to form oxy-hæmoglobin; oxy-hæmoglobin behaves as a weak acid, and occurs to the extent of 86.78 to 94.30% in dry human blood. It is formed very readily whenever hæmoglobin comes in contact with oxygen or atmospheric air. That this absorption has nothing to do with the diffusion of gases, but is due to a chemical combination of the atomic compounds, is shown by the fact that when pure oxygen is respired the blood does not take up more oxygen than when atmospheric air is respired; further, animals made to breathe in a closed space can absorb almost all the oxygen even to a trace into their blood before suffocation takes place. (Another absolute refutation of the statement that oxygen only enters the blood through digestion.)

Of course if the absorption of oxygen was due to diffusion when pure oxygen was respired more oxygen would be absorbed, while in the respiration of atmospheric air absorption could not possibly occur to the extent that it does. But the law of diffusion comes into play to this extent, that oxygen diffuses from the air vesicle of the lungs into the blood plasma, and the hæmoglobin



of the red corpuscle forms at once with the oxygen, oxy-hæmoglobin.

The Doctor makes the statement that the vesicle of the lungs is lined with glandular structures. The visicle has but a single layer of cells, but I shall speak of that later on.

"Gaskell finds that dilute solutions of acid, lactic one part to ten thousand water, when passed through a vessel enlarges it; while an alkaline solution 1-10,000 always diminishes its size, usually to absolute closure. Thus it is clear that these solutions are antagonistic to each other to a great extent."

Dr. Atkins not recognizing this principle puts the lungs he is experimenting on into a solution of salt and is surprised that nothing can pass through them. The fact that cell activity stops at death, and the vessels are no longer forcibly distended by the pulsations of the heart, naturally with the closure of all the minute capillary vessels in this solution the cells with their cement substance made a membrane as impermeable as if varnished.

As Dods points out, "All the operations of nature tend to equilibrium." Were it not so there would not be motion anywhere. Thus all the operations of nature tend to balance each other, and there is no exception to that rule here. Every movement of muscles and tissues generates acids, and these acids are kept in check by the alkalinity of the circulating fluids of the body. Whenever we have an excess of acids in the tissues there is a corresponding dilatation of vessels, and this of course must result if long continued in inflammation.

As before stated, oxy-hæmoglobin behaves as a weak acid and is formed rapidly when hæmoglobin comes in contact with oxygen of air; consequently when the circulation is stopped, as it was in the experiments conducted by Dr. Atkins, the oxy-hæmoglobin is rapidly reduced to hæmoglobin, and the tissues of the lungs being no longer bathed in the acid acting oxy-hæmoglobin, which latter we have learned normally keeps the protoplasmic elements of the capillaries in an expanded condition so as to allow of free passage into them of gases or other elements, the cell shrinks and becomes impermeable.

Therefore the argument advanced that the rapidity of the circulation is a detriment to the exchange of gases is absurd, for the greater the number of red corpuscles that can come in contact with the air sacs the better.

To be sure the blood only remains in contact with the membrane a second or two, but we must remember that this blood is spread out over a very great area—over one hundred times greater than the whole surface of the body; or more technically, ninety square meters, which gives it ample time to take up or give off all the gases necessary for the economy. Take even water in the same quantity and spread it out over a similar area at a temperature of  $100^{\circ}$  and see how long it would take to evaporate. While this latter statement is not given as an analogous case, it does give an idea of what transpires in the lungs, for virtually the blood is passed over a heated surface of 90 square meters at the rate of 30 feet per second.



Then, too, we must bear in mind that the partition between the blood and the air is only 1-0,000th of an inch in thickness, and, further, it is made up of living cells of but one layer and they are joined together by a cement substance, and that these cells have all the properties of living cells. All who have made a study of biology know that dilatation and contraction of the cell protoplasmic substance goes on continuously, and that there is an ingoing and outgoing current, and that the cells have the power to take up or reject materials brought to them.

Of course the lungs could be filled with oxygen and sealed up and not have it escape. Why not? As soon as the circulation of the blood ceases the action of the corpuscles upon the cells of the capillary walls and air vesicles also stops, their protoplasmic contraction and dilatation comes to an end, and with it their power to pass materials through them, then these cells and the cement substance that holds them together forms a solid membrane through which nothing can pass by osmosis.

The next statements are devoted to reiterating old physiological truths, and the Doctor ends by making the statement: "Therefore it is evident that hydrogen thus liberated would, under the action of electro-chemic energy, unite with the oxygen of the atmosphere and form water which becomes vaporized by the heat of the lungs. In this union of hydrogen and oxygen and the union of carbon and oxygen will be found every molecule of atmospheric oxygen which is supposed to pass into the lungs by osmosis."

If all of the oxygen is extracted from the blood as above stated why is it a fact that an animal confined in a closed chamber will absorb every particle of oxygen even to a trace? Landois says, speaking of asphyxia: "The blood is almost black, and is deprived of almost all of its oxygen, its hæmoglobin being nearly all in the condition of reduced hæmoglobin, while ordinary venous blood contains a considerable amount of oxy-hæmoglobin as well as hæmoglobin." Why does dispnoea occur when air is deficient in oxygen if it is not absorbed by the lungs, and why does all oxygen disappear from the blood?

We have no proof that the generation of electricity is affected to any appreciable extent (in so far as the argument of respiration is here concerned) by the absence of oxygen from the air or an excess of carbon dioxide. What I mean by this statement is, you may take a room and set a static machine generating electricity and then turn on the gas and it will generate in this atmosphere till long after any human being would have been asphyxiated.

In asphyxia, during the first stages, there is increased respiration, all the extraordinary muscles are brought into play, dispnoea is rapidly produced and the struggle for air becomes more and more severe, at the same time the oxygen of the blood is being used up, while the blood itself becomes more and more venous. Why, if it be not absorbed by the lungs?

You can force as much electricity into the lungs as you please and it will not prevent asphyxiation, or you can



give pure oxygen and electricity and after a time the animal dies.

I am willing to grant that electricity does play an important part in respiration as well as all other functions of the body but as before stated I believe the arguments here deduced were taken bodily from Dods' Electrical Psychology. I believe this to be true because they are almost identical with the theory advanced in that work, therefore I should like the arranger to show how he has any claim to originality or discovery.

The statement that oxygen could not be combined with the blood unless reduced to a fluid state is too absurd to require answering, but as the Doctor states also that he is going to prove that oxygen enters the blood by route of digestion, I ask, do the conditions of cooling and pressure sufficient to

reduce oxygen to a liquid state exist in the intestines?

On the next page after quoting several well known laws and sandwiching in some more of Dods' ideas, the Doctor quotes from Gray's Anatomy to disprove the statement he made on the third page of his article, where he makes the assertion that nature prevents oxygen by secretion of mucous. There is no secretion of mucous from the inside of an air sac, as this quotation shows that the bronchial tubes lose their muscular and secretory coats before the air cells are reached.

I do not deem it necessary to spend more time in answering the rest of this article for it is simply re-statements of already advanced theories. Those in regard to electricity as being the source of life are good where the Doctor has not strayed too far from Dods' ideas.

---

### Cerebro-Spinal Meningitis.

JOHN PARK DOUGALL, M. D., LOS ANGELES.

WHEN called to a case where the indications clearly point to the exhibition of belladonna or its alkaloid atropin, in a child of say from six months to six years where the abdomen while in a relaxed condition still shows a tendency to protrude and its contents feels gaseous, the tongue has a nasty white coat and a history of a foul watery passage from the bowels is given, the diagnosis should be very carefully made and a prognosis had

better be deferred till a future visit. These cases at the onset may appear as an alimentary difficulty but the initiatory symptoms are always more marked and the trouble is progressive, to the stage of eclampsia, which in some cases is one of the primary signs.

Sodium sulphite will not always relieve the apparently septic digestive tract. Belladonna will only temporarily relieve the listlessness and during the spasms our relaxants are only of short



value, the relaxant dose of apomorphia is very useful in these cases but should be very carefully administered.

Here is a case where our bacteriological methods are of inestimable value for two reasons, 1st, to determine or corroborate the clinical diagnosis; 2nd, to demonstrate or exclude tuberculosis.

While it is true that a positive family history or an inter current pulmonary phthisis may serve our purpose, still at the present time too little stress is laid on the value of a laboratory diagnosis. It must be admitted that in about 50% of the cases only the laboratory results correspond to the clinical picture, but here are one-half in which the diagnosis is made more apparent and consequently the treatment more clear and to the point.

The lumbar puncture may be resorted to and from 4 cc. to 25 cc. of fluid removed; as a general thing in these cases a good flow follows the introduction of the needle, this is especially true of tubercular cases. The organisms are generally few and require cultivation; this may be done by inoculating a slant agar with 1 or 2 cc's of the fluid and

placing in the incubator for 24 to 48 hours; about this time the colonies appear as clear translucent isolated spots with an opaque centre about the size of a pin head. In the tuberculous variety the bacilli are found associated with numerous white blood corpuscles in a spider-like membrane which separates from the fluid; also in this case the fluid generally presents a clearer appearance than in the non-tubercular form where the fluid is often cloudy to opaque depending somewhat on the etiological factor, streptococcic infection often being densely purulent. Another great field here opens up before us, that is, the determination of the specific organism of meningitis. Cases are on record where the typhoid bacillus was the only one demonstrable. Although it is pretty generally conceded that the honor belongs to that twin of the diplococcus of Neisser, the diplococcus of Weichselbaum or *Intracellularis*.

This is only one of the many diseases in the care of which laboratory methods are becoming more and more important as they become better known to the general practitioner.

---

### Mexican Uses of Damiana.

JOHN URI LLOYD.

**D**AMIANA is the native Mexican tea and is used exactly as tea is employed in the United States. Although its use is now largely confined to the poorer classes, it is a favorite beverage

throughout the Peninsula, and also, I am reliably informed, elsewhere throughout Mexico, although this latter statement I have not personally verified. It may be likened in this respect to our domes-



tic Sassafras, which is yet used as a beverage, in a limited way, in rural districts, in many sections of the United States. Damiana is consumed in Mexico as a stimulating beverage, and is not used as a drug, although its qualities are both soothing and stimulating. That it may have, occasionally, an aphrodisiac property, in Mexican view, is evident from the fact that in one case a Mexican who met Americans often, ascribed to it that character. But I find, after patient and particular investigation in the Mexican home of Damiana, that it is universally served as tea, to men, women and children alike. I am therefore inclined to believe that a Mexican statement concerning its aphrodisiac qualities is a reflex touch from American advertisements, or American statements. Its repute here is that of a pleasant, gentle stimulant, and it is also employed as a hot drink when the menses are suppressed. It is also used in colic, the statement being that a strong hot tea of Damiana will bring quick relief. This statement I have also verified from a heavy native exporter of the drug. The fact that Damiana tea is used so extensively, demonstrates that it is harmless, while its employment for persons of both sexes and of all ages indicates that it is not considered a drug exclusively for purposes such as are asserted to be its reputed qualities in American medicine. I am therefore inclined to accept without reserve that the reputed qualities of this drug, as accepted in America, are not based on its Mexican use or reputation.

Damiana is a fragrant, slightly as-

tringent, gentle stimulant or tonic, which in its habitat serves a useful purpose. Its long continued use is not followed by nervousness, as is the case with tea and coffee drinking. I made careful and exhaustive inquiries to ascertain if any ill effect followed its habitual use, and found none whatever. On asking for a cup of Damiana tea at the hotel where this article is written, it was served me without comment, the proprietor stating that he kept the leaf constantly on hand, and considered it a harmless beverage, adding that some people drink it exclusively. I found it not unpleasant to the palate.

And now the question may be asked, is it possible that so many American physicians who have prescribed Damiana have erred in their opinion of the drug? In reply it may be stated that it is not unlikely that, in some instances, a gentle, aromatic stimulant like Damiana may accomplish aphrodisiac effects. In my opinion, however, the shot-gun method of prescribing Damiana has maintained for this innocent drug its chief reputation in a field where error originally placed it. As a rule Damiana is associated in prescriptions with Phosphorus, Nux Vomica, Strychnine, Iron compounds, and such powerful agents as these, where its gentle companionship is dominated by its powerful associates. Or, the name "Damiana" is used as a trade mark term for proprietary preparations in which the other ingredients are concealed. Few physicians employ it alone, and such therapeutical authorities as I know to have investigated it in a pure condition, assert its inefficiency as an



aphrodisiac. Like the harmless Spreading Viper, to which a general public has erroneously ascribed most virulent attributes, but which is almost helpless and is perfectly innocuous, so Damiana has been broadly heralded as a remedy in a field where its innocent qualities forbid it a conspicuous place.

RESUME. Damiana is a Mexican shrub, its habitat being on the peninsular of Lower California, inland from La Paz. It was introduced to American medicine under a misunderstanding of its nature. It is not a Mexican drug, but a general beverage. Its qualities reside in a fragrant leaf, yielding to hot water a pleasant, harmless, tea-like beverage which, so far as history determines, has been consumed from all time by the Mexicans, and is still so employed by all classes, men, women and children alike. It is a gentle stimulant or tonic, kindly in action, pleasant to the taste, and acceptable to the stomach. Its medicinal qualities are mainly restricted, in Mexico, to cases where a gentle stimulant may be effectual, as in suppressed menses, in which it is desirable to administer a hot drink in connection with a grateful aromatic that will not disturb the stomach. In other words, Damiana is a homely, domestic remedy, innocent of the attributes under which, American medicine, it has, for a quarter of a century, been forced to masquerade. Its American field is now restricted, but in its true position the use of Damiana may be broadened. A freshly made tea of prime, recent Damiana herb, when it can be procured, is perhaps the most desirable form of administration, or a concentrated cor-

dial representative of the drug, of exceptional freshness and of prime quality, palatable as possible, made to carry the full qualities of Damiana.

La Paz, Mexico, Feb. 10, 1904.

Reprint from Pharmaceutical Review.

### Surgical Hints.

[From the International Journal of Surgery.]

After suturing a tendon, place the parts in such a position that the muscle and the tendon will be as thoroughly relaxed as possible.

When a fracture cannot be perfectly reduced and the parts brought into good approximation, it is pretty nearly malpractice to be satisfied with our efforts until we have tried anesthesia to the full surgical degree.

If the meatus needs to be split for the passage of sounds, remember that the posterior boundary of the fossa navicularis may be as tight as the meatus itself and must be incised to the same extent as the latter before the instrument can be passed.

Formalin is a poor disinfectant when applied directly to the bladder, as it gives a good deal of pain if used strong enough to have an antiseptic action, and the solutions of from two to five drops to the pint, which alone can be borne, are practically useless.

Don't use ice in the treatment of paraphymosis. It can do no good, and increases the tendency to sloughing in parts the vitality of which has already been impaired. Go to work and reduce the constriction at once, by manipulation if possible; by the knife if necessary.





# DIRECT MEDICATION

## Specific Indications

ARE MET BY

## Normal Tinctures

THEY ARE

Minim for grain in strength

Standardized by Assay and Physiological test

Prepared from fresh drugs

Extracted with pure grain alcohol

Bright, Clean, Reliable

Economical, because they contain no waste material

Do not prescribe them because they bear a certain label, but because they are the best that science, skill and long experience can produce.

Send for revised edition of our booklet entitled "NORMAL TINCTURES," it gives the therapy and doses of 145 of these NORMAL TINCTURES and is sent free, to physicians only, upon request.

---

### The WM. S. MERRELL CHEMICAL CO.

Cincinnati, O.

New York  
96 Maiden Lane.

Chicago  
231 Lake St.

New Orleans  
426 Camp St.

San Francisco  
19 Stevenson St.



---

**DEFENSE** <sup>Of</sup> MALPRACTICE  
SUILS IS GOOD

But the Busy Doctor also wants

**PROTECTION**

**The Fidelity and Casualty Comp'y of New York**

Defends its clients against any such Proceedings at its Own Cost,  
and if Damages are awarded will **PAY** them.

Special Accident and Health Insurance for Physicians, Surgeons, Dentists, Etc.

AGENTS EVERYWHERE.

---



## THE CALIFORNIA MEDICAL JOURNAL

Published Monthly.

\$1.50 Per Year, in Advance.

**D. Maclean, M. D., Editor.****F. C. Maclean, M. D., Bus. Mgr.**

WITH THE COLLABORATION OF

D. Maclean, San Francisco.

M. H. Logan, San Francisco.

John Fearn, Oakland.

Geo. G. Gere, San Francisco.

J. B. Mitchell, San Francisco.

Geo. D. Rich, Sonoma.

Chas. Clark, San Francisco.

Frank G. Fay, Sacramento.

B. Stetson, Oakland.

L. A. Perce, Long Beach.

Ovid S. Laws, Los Angeles.

L. F. Herrick, Oakland.

J. A. Munk, Los Angeles.

P. F. Bullington, Oroville.

W. S. Mott, Salem, Ore.

F. T. Lamb, San Francisco.

W. A. Harvey, San Francisco.

B. Roswell Hubbard, Los Angeles.

### Contributions are Solicited from all Physicians.

CONTRIBUTORS are entitled to ten extra copies which will be mailed direct from this office if addresses are furnished. Reprints of articles will be furnished at cost if order accompanies Mss. Cuts necessary to illustrate articles will be made gratis.

SUBSCRIBERS will please notify us if Journal is not received regularly.

### Drop Us a Postal Card When You Move, Giving Old and New Address.

ADVERTISERS will please take notice that forms close on the 20th of each month and no matter can receive insertion after that date.

Let all communications be addressed and money orders be made payable to the

CALIFORNIA MEDICAL JOURNAL,

1466 Folsom St., San Francisco, Cal.

## *Editorials.*

### The California Medical College.

The Twenty-Sixth Annual Session of the California Medical College opens on the first Monday of October. The College has thirty professors and instructors. It is furnished with all the appliances necessary to acquire a thorough medical education. The method of instruction is by lessons, recitations, lectures, diadactic and clinical, with demonstrations. The chemical, physiological, histological and pathological laboratories are conducted under able teachers and demonstrators.

Students have full advantages in the City and County Hospital, which has four hundred beds. It is visited by

Students two days in the week under a Medical and Surgical Staff from the College. Senior Students have access to the Maternity Ward where they receive special and practical instruction in the management of labor, and care of mother and child.

We are most pleased to welcome the appearance of the Los Angeles Journal of Eclectic Medicine. Dr. O. C. Welbourn the editor and Dr. M. B. Ketchum the business manager, have both had considerable experience in medical journalism and may be counted on to guide the new enterprise to success. Every new eclectic journal is equivalent to a new army in the field and we cannot have too many of them. We trust that they will meet with hearty support and encouragement.



### *Editorial Notes.*

The California Medical College opens its Twenty-seventh Annual Session on Monday, the 3rd day of October. Send to the Dean for Catalogue.

The Irving Sanatorium have no vacant beds. Application must be made in advance. Such is popularity.

L. A. Perce, of Long Beach, attended the August meeting of the Board of Medical Examiners in the City, and was elected President. Will harmony and fair dealing now prevail?

Dr. Lamb's Sanatorium is furnished with all the appliances that modern methods in the treatment of disease requires. Trained nurses and the best medical skill in attendance.

Dr. W. P. Scott of McKittrick has an interesting case of skin grafting at the Irving. He has made a successful implantation of one hundred and eighty square inches. Dr. Scott was ably assisted by Dr. Hunsaker with his razor in removing the grafts from seventy-five Red Men who cheerfully bared their arms to assist a brother in distress.

When the Faculty of the California Medical College returns from the Summer outing we are promised numerous articles on various topics. In the words of the advertiser—watch the October Number.

Dr. E. J. Petersen of Los Olivos made us a pleasant call. He contemplates locating in the city. We welcome him as one of the most successful graduates of the California Medical College.

Dr. Chas. A. Hascall writes us from Juneau, Alaska, that he is well and prospering.

Dr. H. B. Crocker reports that work in his new Sanitarium at Healdsburg is well under way. Already the hospital is filling with patients and prospects are good for success and prosperity.

From Dr. John Park Dougall, who is in charge of Dr. Solomon's practice, in Los Angeles, we hear that he hopes and expects to return to San Francisco soon.

The Deaconess Hospital of Los Angeles possesses all the conveniences of a hospital and the comforts of a home. It would be a pleasure to the sick under the care of Dr. Welbourn.

Dr. E. H. Byron of Guerneville has been in town.

Dr. C. A. Burrows is located at Armora, Cal.

Dr. Walter A. Harvey is at Sparks, Nevada.

A St. Louis court has decided that the doctor's sign, his only form of display advertising, cannot be hung outside his office in a certain residence quarter of that city. Dr. Henry Schwarz, of Westminster place, St. Louis, hung out his shingle in the ethical way, but the neighbors brought suit to have it removed. The plaintiffs alleged that Westminster place was laid out 12 years ago for a residence district, with restrictions against every form of business. The court upholds this contention, and enjoins the doctor from carrying on his practice at stated office hours. So long as he has no office hours he is not carrying on a business, the court reasons.—*Printers' Ink.*



## SOCIETIES.

## The County Medical Society.

The regular meeting of the San Francisco County Society of Physicians and Surgeons was held Wednesday evening August 3rd, at the office of Dr. Gere.

Dr. C. A. Cordiner, the new assistant in anatomy at the California Medical College was elected to membership.

The Secretary-Treasurer reported collections amounting to \$7.10 and expenditures of \$5.00.

The committee on auditing the books of the retiring treasurer filed their report, and the new treasurer was instructed to begin the year with clean books and call upon all members to come up with dues.

Dr. D. Maclean presented the subject of the evening "Heart Remedies" in a very interesting manner. He began with the following definition of "Specific Medicine" as understood by the Eclectic School. "Specific Medicine is the selection and application of remedies to pathological conditions as manifested by definite symptoms." Thus, the symptom tells not only the pathological condition but is also the key to the remedy to be used. Considering heart remedies along this line of specific medication he said that among the most important are digitalis, crataegus, cactus, strychnine, strophanthus, spartein, nitroglycerine and convallaria. Digitalis should be used with a rapid, weak, compressible pulse, cyanosis, dyspnoea and oedema, with valvular incompetency or insufficiency of mitral

or aortic valves. Should not be used in stenosis. Aortic or mitral stenosis call for strychnine. Cactus should be given in feeble, irregular pulse, with pain in the heart. Strophanthus in feeble but regular pulse. Crataegus may be used where cactus is used, but must be given in larger doses, and this generally makes the patient sick. Spartein is used like strychnine in feeble heart and stenosis of the aortic or mitral valves. Nitroglycerine is indicated in capillary anemia, paleness of the face. It dilates the capillaries and takes the burden off from the heart. Convallaria is to be used in weak heart where there is kidney trouble. It increases blood pressure and also increases secretion independent of blood pressure. It is useful in oedema.

Dr. L. A. Perce, of Long Beach, President of the State Board of Medical Examiners, called attention to the danger of nitroglycerine when the face was flushed, regardless of the condition of the heart. It is a remedy which cannot be kept up indefinitely. It is particularly dangerous to young women as its continued use leads to serious menstrual disturbances. He referred to the reputed cumulative effects of digitalis, but said he had failed to observe it. He uses digitalis long continued, but in small doses. In giving convallaria it is well to combine with apocynum as they strengthen each other. They are especially valuable in oedema. Strophanthus should never be given in combination as other remedies have a tendency to precipitate it. Patient coming from high altitude suddenly to sea level often find that heart remedies



formerly useful failed to produce the desired effect and a change of remedies must be accordingly made.

Dr. C. N. Miller said that he found care in hygiene and diet to be among the most valuable of heart remedies.

Dr. Gere called attention to the fact that nitroglycerine lowers pressure and coaxes the heart while digitalis pushes it. Digitalis he thinks is overrated. Cactus is a good stomachic as well as a heart tonic. Lycopus is very useful in continued rapid pulse, in exophthalmic goitre and in tubercular conditions.

Dr. Forster considers viburnum an excellent indirect heart remedy.

Dr. Atkins did not pin so much faith on medicine, but when the heart was wrong he thought it well to look out for the nervous system, give plenty of sun and air.

Dr. Maclean in closing the discussion added veratrum viride to his list as being of special value in the rapid bounding pulse.

Papers were announced as follows: August 17, Dr. C. N. Miller, on "Medical Miscellany." September 7, a paper by Dr. C. A. Cordiner.

W. C. BAILEY, Secretary.

The San Francisco County Society of Physicians and Surgeons met Wednesday evening, August 17th, in the office of Dr. Gere, sixteen members were present and two visitors.

The secretary-treasurer reported \$8.10 on hand.

Dr. C. N. Miller read the paper of the evening. His subject was "Medical Miscellany." He dealt largely with personal experiences in his own prac-

tice and brought out prominently his success with fresh pineapple juice and with correction of errors in the spinal column.

Fresh pineapple juice has for its specific indications high temperature and coated tongue. It may be prescribed with quick and gratifying results in scarlet fever, diphtheria, typhoid fever, measles, pneumonia, la grippe, rheumatism, malaria or any disease accompanied by a foul tongue and septic condition of the digestive tract. Pineapple juice owes its therapeutic value to a peculiar digestive ferment that quickly attacks all albuminoids. This ferment is rendered wholly inert by heat. Hence for medicinal purposes the juice cannot be subjected to the preserving processes employed in preparing canned goods or syrups, and it goes without saying that all chemical preservatives must be absolutely forbidden. The remedy must be freshly prepared and used without change, exactly as furnished by nature. Dose: in acute diseases, one or two tablespoonfuls every two hours, in water if preferred. In convalescence and in dyspepsia or other chronic diseases, two to four tablespoonfuls in water after meals.

The spine he describes as a flexuous and flexible column with its four curves compensatory to each other. Life is manifested by flexibility and activity; death by inflexibility and inactivity. Beginning at the lower curve we find the sacrum, which is not liable to displacement, although some Osteopaths claim as many as 500 cases of displacement of the innominate bones. The



next curve is found in the lumbar region, the very citadel of life, wherein are found the solar plexus, the hypogastric plexus, and the various ganglia reflexing to every part of the body by the sympathetic system. All of these are in their natural relation and best form only when the lumbar curve is convex forward. When by faulty position that curve is changed or obliterated it must effect all these important structures and organs in their relation to the spine and the spinal nerves. By flattening of the curve the lower end of the sternum and the pubic bone may be brought very near together loosening the linea alba and causing a general ptosis of the abdominal viscera. Nature forms a good bustle in the proper place, but man tugs away until that bustle gets around in front, and he is ready for rheumatism, dyspepsia and all the other ills traceable to the abdominal region. The convexity of the lumbar region should be kept well to the front and the bustle behind. This should be done as a matter of regular habit, as in time the separate vertebrae will accommodate themselves to the abnormal position and it will be impossible then to correct the untrue curve. In recent cases of displacement the Osteopaths may be able to replace rapidly but in chronic cases time must be taken. It may be ten years getting out of place and then when attempt is made to return rapidly there is trouble. The dorsal curve has its concavity forward and any change in its arc must have a corresponding effect upon the ribs, the emerging nerves and the whole thoracic viscera. The Hindus by their

methods of Yogi have been able to keep the dorsal region of the spine in a good condition. The Yogi complete breath is accomplished by four modes: the high breath, the mid breath, the low breath, and the combined breath. By using all these the spine is kept flexible. The cervical curve should have its convexity forward, but we "crane" (rubber) our necks until it is almost straight. This interferes with the cervical plexus, the sympathetic system, etc., and we have consequent heart troubles and other ills hailing from that region. The automatic action of the body is controlled by the spinal cord, hence we should train to flexibility and perfect automatic action. Take one hundred chronic invalids and you will find ninety-nine with rigid or misplaced spines. Take one hundred aged people and you will have one hundred rigid spines. Keep limber and you will keep young.

The paper was freely discussed by the doctors present.

Announcement for future papers were made as follows: Dr. Cordiner, Sept. 7; Dr. Tomkins, September 21; Dr. D. Maclean, on Kidney Remedies, Oct. 5.

W. C. BAILEY, M. D., Sec'y.

---

#### State Board Examination—Aug. 1904.

---

#### OBSTETRICS.

1. Describe the inlet or brim and the outlet of the female pelvis.
2. Describe three stages of normal labor.
3. Define the following terms: Presentation, Rotation, Version.



4. Mention four vertex presentations in order of preference.

5. Give cause prophylaxis and treatment of Ophthalmia Neonatorum.

6. Mention a typical case for Cæsar-ean Section, one for Symphyseotomy, one for Embryotomy and two for Forceps Delivery.

7. Give three causes and full treatment of Postpartum Hemorrhage.

8. Give management of a case of Placenta Previa.

9. Give prophylaxis and treatment of Puerperal Eclampsia.

10. Give cause and treatment of Puerperal Fever.

11. Mention (a) Sure signs of Pregnancy.

(b) Indications for abortion or miscarriage.

(c) Precautions for preventing lacerations of os uteri and perineum.

#### PATHOLOGY.

1. Describe the lymphatic involvement in an advanced case of carcinoma of the uterus. Describe the lesions in acute osteomyelitis.

2. Enumerate the cutaneous granulomata.

3. Give causes and results of ureteral obstruction.

4. Describe the repair of a coeliotomy wound.

5. Enumerate the tumors of the bladder, and describe the most frequent variety. Enumerate the varieties of tumors of the brain.

6. Describe briefly the varieties of mammary abscess.

7. Name the clinical varieties of tuberculosis of the skin.

8. Examination of X-ray plates.

9. Examination of gross pathologic specimens.

10. Examination of microscopic sections.

#### PHYSIOLOGY.

1. Describe briefly the effects of a lesion involving the posterior limb of the internal capsule.

2. Mention the symptoms of a unilateral lesion of the spinal cord in the dorsal region.

3. How is vision affected by a break in the right optic tract?

4. What organs are innervated by the pneumogastric nerves?

5. Locate and describe the motor zone of the cerebrum.

6. Where are the trophic centres which govern the nutrition of the skeletal muscles? Where are the vasomotor centres probably located?

7. What is the chemical reaction of saliva, gastric juice, bile, pancreatic juice, and succus entericus?

8. What are the functions of the liver?

9. Trace the digestion of a ham sandwich.

10. Where and how does impregnation occur?

#### CHEMISTRY.

1. Give the physical and chemical properties of oxygen and hydrogen; describe a simple method of obtaining each and give chemical formula for a combination of the two.

2. Explain the process of respira-



tion, from a chemical point of view.

3. Give formula for Hydrochloric acid; method of obtaining it and test for the same.

4. Name two important organic compounds and give formulæ for same.

5. What are carbo-hydrates? Give examples.

6. Give formula for grape sugar test for the same and reaction.

7. Give method of determining free Hcl. in gastric juice.

8. What is Urea? Give method of determination quantitatively with reaction and formulæ.

9. (a) What is Glycogen? (b) Where is it found? Give its properties. What change does it undergo in the system?

10. What are ptomaines? Mention some poisonous ptomaines.

#### SURGERY.

E. C. BUELL, M. D., EXAMINER.

1. Describe a compound fracture and outline treatment.

2. What is an adenoma, a sarcoma, a carcinoma?

3. What is a pyosalpinx, a hydrosalpinx? Outline treatment for each.

4. What are the symptoms of stone in the urinary bladder? How would you recognize the presence of stone, and how would you treat the case?

5. What is Mastoiditis? Give its causes and treatment.

6. Describe the different forms of talipes.

7. What causes varicose ulcers, and how would you treat them?

8. Give causes and treatment of tetanus.

9. For what conditions would you perform a castration? Describe your method.

10. Discuss tumors of the female breast.

#### ANATOMY.

L. A. PERCE, M. D.

*Answer any 10 questions but no more.*

1. Describe the skull, naming all the bones of the cranium and face.

2. Describe the inferior turbinated bones, and give their articulations.

3. What muscles are attached to the lower jaw?

4. Give the difference between the male and female pelvis.

5. What muscles are attached to the fibula?

6. What is meant by the term "origin and insertion of a muscle?"

7. What is meant by the term "tendons, aponeuroses and fasciæ?"

8. How many branches are given off the external carotid artery? Name them.

9. Of what does the cerebro-spinal centre consist?

10. Name the divisions of the brain, and give their relative positions.

11. Describe the great sciatic nerve, and give its branches.

12. Describe the human nose.

13. Describe the lachrymal apparatus.

14. Describe the gall bladder.

15. Describe the ovaries, and give their blood and nerve supply.

The fourth Pan-American Medical Congress, which was to have convened the latter part of December this year at



Panama, has been postponed until the first week in January. This was done at the request of many physicians who proposed to attend it, as they desired to be at home with their families during the Christmas holidays.

The delegation from this side of the continent will therefore leave Tuesday, December 27th, if they go down from New York by the regular Pacific Mail lines, or at other dates if they go by way of New Orleans or Jamaica. The dates of sailing from the Pacific Coast have not yet been ascertained. The congress will be held from the fourth to the seventh of January.

The officers of the congress, appointed by President Amador of the Republic of Panama, are Dr. Julio Leon, Dr. Giro Uriola, Dr. J. Calve, Dr. Carlos Costa, Panamanians; Dr. Gorgas, chief of the Panama Canal Sanitary Commission; Drs. Carter and Ross, Americans; Dr. Manuel Corales, Cuban; Dr. M. Stern, English; and Dr. Oduber, Dutch.

This congress bids fair to be the most successful Pan-American medical congress that has ever been held on account of the central situation of Panama and its easy approach from both sides of North America, Mexico, and the Central American republics, as well as from the countries on the north and west sides of South America.

There will be but four sections at this congress—surgery, medicine, hygiene, and the specialties.

The American Medical Society for the Study of Alcohol and other Narcotics was organized June 8, 1904, by

the union of the American Association for the Study of Inebriety and the Medical Temperance Association. Both of these societies are composed of physicians interested in the study and treatment of inebriety and the physiological nature and action of alcohol and narcotics in health and disease. The first society was organized in 1870 and has published five volumes of transactions and twenty-seven yearly volumes of the Quarterly Journal of Inebriety, the organ of its association. The second society began in 1891 and has issued three volumes of transactions, and for seven years published a Quarterly Bulletin containing the papers read at its meetings. The special object of the union of the two societies is to create greater interest among physicians to study one of the greatest evils of modern times. Its plan of work is to encourage and promote more exact scientific studies of the nature and effects of alcohol in health and disease, particularly of its etiological, physiological and therapeutic relations. Second, to secure more accurate investigations of the diseases associated or following from the use of alcohol and narcotics. Third, to correct the present empirical treatment of these diseases by secret drugs and so-called specifics, and to secure legislation prohibiting the sale of nostrums claiming to be absolute cures containing dangerous poisons.

Fourth, to encourage special legislation for the care, control and medical treatment of spirit and drug takers. The alcoholic problem and the diseases which center and spring from it are



becoming more prominent and its medical and hygienic importance have assumed such proportions that physicians everywhere are called on for advice and counsel. Public sentiment is turning to medical men for authoritative facts and conclusions to enable them to realize the causes, means of prevention and cure for this evil. This new society comes to meet this want by enlisting medical men as members and stimulating new studies and researches from a broader and more scientific point of view. As a medical and hygienic topic the alcoholic problem has an intense personal interest, not only to every physician, but to the public generally, in every town and city in the country. This interest demands concentrated efforts through the medium of a society to clear away the present confusion, educate public sentiment, and make medical men the final authority in the consideration of the remedial measures for cure and prevention. For this purpose a most urgent appeal is made to all physicians to assist in making this society the medium and authority for the scientific study of the subject. The secretary, Dr. T. D. Crothers of Hartford, Conn., will be pleased to give any farther information.

#### AMERICAN MEDICAL EDITORS' ASSOCIATION.

The thirty-fifth annual meeting of the American Medical Editors' Association, held at Atlanta City in June, 1904, was one of the most successful in its history, C. E. de M. Sajous, president, presiding.

The many papers presented, as well as the numerous applications received

for membership, is possibly the best indication of the interest displayed in the Society.

Among the interesting papers read and thoroughly discussed, we would mention:

"Proprietary and Patent Medicines," Harold N. Moyer, Chicago, Ill.

"Military Medical Journalism of the Present Day," Major J. Evelyn Pilcher, Carlisle, Pa.

"Sundown Journalism," T. D. Crothers, Hartford, Conn.

"Medical Illustrations," H. V. Wurde-mann, Milwaukee, Wis.

"Medical Journalism of the Pacific Coast," Winslow Anderson, San Francisco, Cal.

"The Medical Press vs. The Modern Plague," William Porter, St. Louis, Mo.

"Reading Notices," W. C. Abbott, Chicago, Ill.

"Imitation Journalism," H. Waldo Coe.

Following an animated discussion of Dr. Porter's article relative to the use of patent nostrums, the following resolutions, endorsing the action of Mr. Bok, editor of the "Ladies' Home Journal," was favorably acted upon:

Whereas, The public is, and long has been suffering from the use of nostrums, and from the misuses of medicines, and,

Whereas, The medical profession and press have endeavored by every means in their power to instruct the laity upon the subject, and

Whereas, Some journalists either do not understand the true situation, or find it to their pecuniary gain to favor the use of nostrums and pander to the greed of their manufacturers at the ex-



pense of the health of even the lives of their dupes among the people, and,

Whereas, the eminent editor of the "Ladies' Home Journal," Mr. Edward Bok, in an able and vigorous editorial on page eighteen of the May number of that journal, laid the truth of the matter before his readers, thus aiding in the work of warning and educating and conserving the health and welfare of the public, be it

Resolved, That the American Medical Editors' Association approves and commends Mr. Bok for the intelligent, honest, fearless and well grounded position he has taken, which has been thoroughly appreciated by us and by the medical profession generally.

Resolved, That copy of these resolutions be spread upon the Minutes of this meeting, be transmitted to Mr. Bok, and be published in the medical journals throughout the country.

Dr. Porter presented the following resolution bearing upon the death of Dr. I. N. Love, an ex-president of the American Medical Editors' Association:

Through the joys of to-day come refrains in minor key. We welcome our friends again, but some have dropped out for ever. One day eager in all that makes the activities of life—the next cold and silent on the bosom of the dark mysterious river. Dr. I. N. Love was no ordinary man. Endowed as few are, he cultivated the art of showing to others the natural buoyance of his nature and keeping well within himself the burden and shadows that few knew of and the many never dreamed of. No one was better known in the medical societies of the country and especially

in this Association. Quick, witty, generous, he made friends at every turn, and if to-day he made an enemy, to-morrow he was likely to kill him with kindness.

Of his work as a physician and an editor, you who were his friends through the decades, need not be told. As a physician he was sympathetic and intelligent beyond the possibilities of most men. The devotion of his patients was a natural sequence following the sunshine of his presence in the sick room. As an editor he was original and personal, but his personalities were more likely to be eulogistic than censorious. He called his Journal "a reflex of the medical profession," but it was more notably a reflex of his own life.

Realizing the difficulty of expressing a just appreciation of the life of one so brilliant, so fascinating and energetic, yet in token of the sense of loss sustained by the Association, be it

Resolved, That the members of the American Medical Editors' Association, while mourning the decease of Dr. I. N. Love, in the zenith of his manhood and opportunities for usefulness, remember and cherish the recollection of all in his most attractive individuality that made his record so large a part of the history of this Association.

Resolved, that a large page of our record books be set apart for the resolutions and that a copy be sent with our truest sympathy to the members of his family.

WM. PORTER,  
C. F. TAYLOR.

A committee was appointed by the Chair, composed of C. F. Taylor, chair-



man, Dr. Hogehead of San Francisco, Cal., and Dr. Pilcher of Carlisle, Pa., and the Secretary, member ex-officio, to draft a new Constitution and By-Laws to be presented at the next meeting.

The following officers for the coming year were elected:

President, Harold N. Moyer, Chicago, Ill.

First Vice-President, C. Evelyn Pilcher, Carlisle, Pa.

Second Vice-President, O. F. Ball, St. Louis, Mo.

Secretary and Treasurer, J. MacDonald, Jr., New York.

The Executive Committee: C. E. de M. Sajous, Chairman; John Punton, W. A. Young, W. C. Abbott, H. M. Simmons, C. F. Taylor, and Chas. Wood Fassett.

This Association now enjoys a membership of over 100 active medical editors, and those medical journalists not now associated are invited to present their applications for membership to the Secretary, Dr. J. MacDonald, Jr., 100 William street, New York City, N. Y.

#### Treatment of Chronic Ulcer of the Leg of Long Standing.

BY HORATIO W. A. COWAN, M. B., C. M., ABERD.

From *The Lancet*, Lond., Eng., July, 1904.

At the beginning of the present year, I was called to a woman, aged fifty-four years, who had a chronic sloughing ulcer for twenty-two years, situated on the outside of the left leg, some ten inches long and three inches wide, with indurated edges and some thrombosis of the veins of the inside of the knee.

Having first cleansed the ulcer with charcoal poultices for two days, I applied wet butter cloth, and then spread Antiphlogistine over it, after which cotton wool and a bandage were put on. This was done every day by the patient's friends for four months. The ulcer is now quite healed over and the induration is all gone. She is able to resume her ordinary housework. I publish this case in the hope that it might be useful to others, as Unna's paste and all sorts of methods had been previously tried. I may say that I have no personal interest in Antiphlogistine.

#### Improvement on the Levis Carbolic Injection for Hydrocele.

Bodine (*Int. Jour. of Surg.*) always washes the hydrocele sac free from albumen before injecting it with carbolic acid, and finally washes out the injected carbolic acid before closing the puncture. This is to obviate the incompatibility between albumen and carbolic acid and to prevent phenol intoxication. The trocar used is sufficiently long to accommodate two cannulæ and traverse the sac through co-cainized areas—one at the lowest and the other at the highest levels of the sac. When the trocar is withdrawn, a cannula remains in each opening. Sterile salt is caused to enter through the lower tube and escape at the upper until the issuing fluid no longer shows albumen by the heat test. The sac is then emptied of salt solution and one to two drs. of Calvert's liquefied crystal carbolic acid is introduced by a hypodermic syringe through the lower



cannula, and the sac manipulated to insure thorough application. Salt solution is again run through the sac until the escaping fluid no longer produces coagulation when added to the original hydrocele fluid. Finally the sac is completely emptied and the punctures sealed with collodion.—*Charlotte Medical Journal*.

#### A Scotch Doctor's Opinion.

The *Quarterly Journal of Inebriety*, so well and favorably known through the instrumentality of its brilliant and philanthropic editor, T. D. Crothers, A. M., M. D., quotes the following statement in reference to pain-relieving remedies from one of Great Britain's noted medical men, Dr. John Stewart Norvell, Resident Surgeon, Royal Infirmary, Edinburgh: "Antikamnia Tablets are a remedy for almost every kind of pain, particularly for headaches, neuralgias, and neuroses due to irregularities of menstruation. They act with wonderful promptness; the dosage is small, two tablets. The undesirable after-effects, so commonly attending the use of other coal-tar analgesics, are entirely absent, and they can therefore be safely put into the hands of patients for use without the personal supervision of a physician."

When the menses are suppressed from exposure, or from colds, wet feet, the result of emotional excitement, or febrile conditions, if not complicated with organic change, but by more passive congestion, Aletris Cordial Rio is a very reliable remedy. It is an emmenagogue, not abortifacient.

#### PROTECTION NEEDED.

According to the Editor of the *Medical News*, John P. Percell, of New Dorf, Staten Island, has just recovered \$5,000.00 from a reputable physician in that town. The case was founded on a supposed confusion of Bronchial Pneumonia and Diphtheria. A good deal of irrelevant evidence was allowed, and the hard working physician had to pay the bill, although it was clearly shown that he was not technically at fault. While the courts seem to be friendly disposed toward all forms of quackery, they are too often disposed to be too severe on the regular practitioner, especially if there is any political influence. It is in case of this kind when the protection of the Fidelity & Casualty Co., of New York, is most appreciated, especially as the expense is very light, and the security and reliability of the very highest order.

#### How to Avoid Prescribing Opium and Morphine.

Dr. N. B. Shade, of Washington, D. C., in an article published in the *Medical Summary*, refers to many unfortunate effects of prescribing opium and morphine, intimating that the depressing after-effects of the administration of these drugs more than offsets the temporary good accomplished by their use. He mentions a very prominent congressman whose life, in his opinion, was cut short by the administration of morphine hypodermically in the case of pneumonitis. Dr. Shade states that he still prescribes morphine, but very seldom, as he finds it much safer to use Papine. Papine, in his



opinion, possesses all the desirable qualities of opium, with the bad qualities eliminated. Some of the brightest minds of the present age are now being devoted to the development of a therapy in which the primitive bad effects of many important drugs are eliminated. Where the therapeutic action of morphine or opium is desired, it would seem to be a safe procedure to give Papine a trial.

---

#### Enteroclysis.

By SOL. NEWMAYER, M. D., Phila., Pa.

Among the varied causes of convulsions none play a more frequent and important part than auto-intoxication. They are more frequent in children, due generally to a possible overfeeding, improper food, or constipation. The intestinal canal contains a variety of toxins, derived from the ingesta, bile and putrid material. There is continuous absorption from the intestines, including the taking up of toxines.

In the acute infections, where convulsions are oftentimes a forerunner, auto-intoxication from the intestinal tract undoubtedly is of no minor importance. Infections are the result of microbes, and we know these bacteria produce something injurious to the system — they elaborate poisonous ptomaines or toxic substances. Nature tries to rid the body of this poison through its various channels of elimination, one of which is the intestinal canal.

It is here we can aid nature with our antiseptics. The value of internal in-

testinal antiseptics, I believe, is greatly overrated. Many of these drugs are soluble and absorbable, and those that are not are so often given in such small doses that in the long journey from the mouth, through the intestinal tract, they have spent most of their value before they have proceeded far.

Not to employ internal antiseptics would be unwise. But I would urge a more liberal use of antiseptic solutions by means of the rectal tube. This enteroclysis has not only its antiseptic value, diminishing the toxicity of the intestinal tract, but oftentimes an antipyretic action. This mode of treatment has not been very popular with the physician because of the unclean work, but I am confident the results will repay one for the labor.

In all cases of convulsions, immaterial of the cause, and in any other condition pointing to auto-intoxication, I flush the lower bowel with a solution of Glyco-Thymoline, one to two ounces to a quart of water.

Glyco-Thymoline is always kept in my emergency grip.

---

#### OPIUM NEUROSIS.

I am very much pleased with Sanmetto. It is a valuable preparation and should be in the hands of every specialist who treats the opium neurosis. In such conditions there is always considerable urethral inflammation besides other diseases of the genito-urinary organs; but opium users are obliged to take twice the quantity of Sanmetto usually prescribed, to produce good results.

F. H. GRIFFIN, M. D.

Germantown, Phila., Pa.



### Neurotic Conditions in Women.

Prof. Chas. J. Vaughan, Chair of Gynæcology, Atlanta College of Physicians and Surgeons, writes: "Neuralgia constitutes the great cause of danger from the employment of hypnotics and narcotics, which only afford relief by numbing, but effect no cure. On the other hand, the formation of a drug habit rather aggravates the condition from which relief was originally sought. Neurasthenia, neuralgia, and other manifestations, either of an active or passive character, are common, and are always peculiarly rebellious to treatment. Cerebro-nervous affections peculiar to women associated with pathological disturbances of the reproductive organs are legion, and most trying to physician and patient. I have found nothing so well suited to these cases as Antikamnia Tablets, administered in doses of from one to three tablets and repeated every one, two, or three hours, according to the attendant's judgment. These tablets afford complete relief without fostering a drug habit, and their exhibition is attended with no unpleasant after-effects. For the relief of painful menstruation there is no combination of remedies so generally successful as Antikamnia & Codeine Tablets. Their sedative, analgesic, and anodyne properties especially commend them in the neuralgic and congestive forms of this distressing affection."

### Book Notes.

*Hints for the Household.*—By Health Officer of San Francisco.

Defines infection and contagion, and gives illustrations which may be clear to the author if not to the reader.

Quarantine and duration of disease is treated for the benefit of the family and physician. Send to Louis Levey, City Hall, for a copy.

*The Theory and Practice of Infant Feeding.*—By Henry Dwight Chapin, A. M., M. D.

Wm. Ward & Co., New York, publishers.

This book has become a standard on the subject of infant feeding. The author maintains that physiological chemistry has not sufficiently advanced to make it a safe guide by itself, and therefore there must be some other rule on the preparation of foods than simply rendering its chemical composition the same as mothers' milk.

The book is in four parts: Part I., The Underlying Principles of Nutrition; Part II., Raw Food Materials; Part III., Practical Feeding; Part IV., Growth and Development.

The great preliminary question of how to get clean, fresh cows' milk is regarded as the fundamental principle of infant feeding, and is given great attention. The chemical and physical adaptation of foods is treated from a scientific standpoint, and is of great practical value. Various tests for milk are given, and many formulæ for preparing modified milk.

The author aims to show the special function of milk in developing the digestive tract, and his object has been to show the underlying principles of growth and nutrition during infancy, leaving it to the physician to apply these principles to each case as it presents itself rather than to lay down rules for the preparation of foods at different ages.



# THE FAMILY LAXATIVE

THE IDEAL safe family laxative, known as SYRUP OF FIGS, is a product of the CALIFORNIA FIG SYRUP CO., and derives its laxative principles from senna, made pleasant to the taste and more acceptable to the stomach, by being combined with pleasant aromatic syrups and the juice of figs. It is recommended by many of the most eminent physicians, and used by millions of families with entire satisfaction. It has gained its great reputation with the medical profession by reason of the acknowledged skill and care exercised by the California Fig Syrup Co. in securing the laxative principles of the senna by an original method of its own, and presenting them in the best and most convenient form. The California Fig Syrup Co. has special facilities for commanding the choicest qualities of Alexandria senna, and its chemists devote their entire attention to the manufacture of the one product. The name—**Syrup of Figs**—means to the medical profession “the family laxative, manufactured by the California Fig Syrup Co.,” and the name of the company is a guarantee of the excellence of its product. Informed of the above facts, the careful physician will know how to prevent the dispensing of worthless imitations when he recommends or prescribes the original and genuine—**SYRUP OF FIGS**. It is well known to physicians that SYRUP OF FIGS is a **simple, safe and reliable** laxative, which does not irritate or debilitate the organs on which it acts, and, being pleasant to the taste, it is especially adapted to ladies and children, although generally applicable in all cases. Special investigation of the profession invited.

## SYRUP OF FIGS

Is never sold in bulk. It retails at fifty cents per bottle, and the name—SYRUP OF FIGS—as well as the name of the CALIFORNIA FIG SYRUP CO., is printed on the wrappers and labels of every bottle.

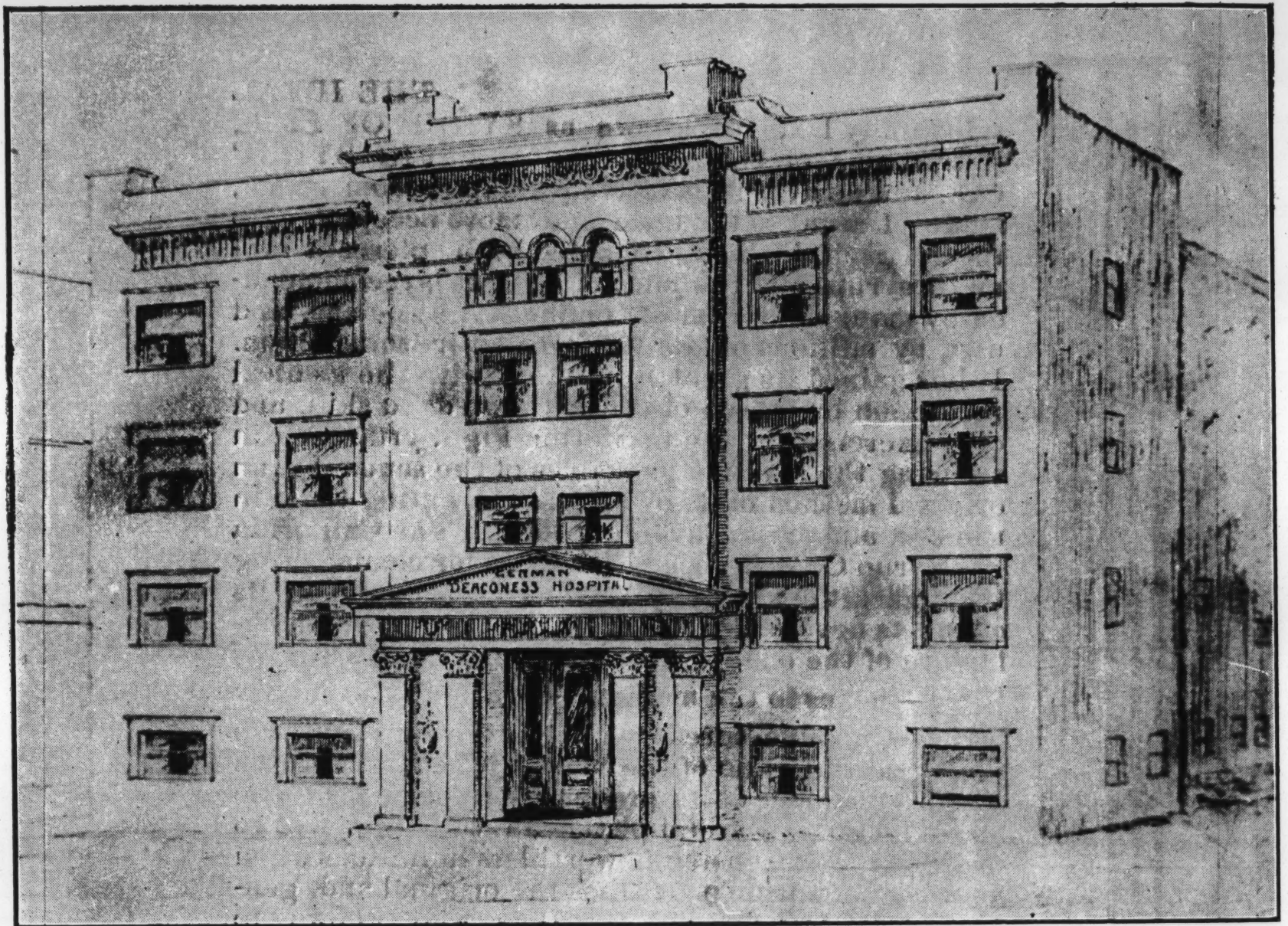
**CALIFORNIA FIG SYRUP CO.**  
SAN FRANCISCO, CAL.  
LOUISVILLE, KY.  
NEW YORK, N. Y.



# THE DEACONESS HOSPITAL

LOS ANGELES, CALIFORNIA

447 S OLIVE STREET



This hospital is pleasantly situated in a healthful location on the hillside adjacent to Central Park. It is only five blocks from the business center of the City, and the street car facilities are the best.

Both medical and surgical cases are given every attention.

In construction and equipment this hospital is absolutely first-class, especial attention being given to asepsis. It has superior operating facilities. Each suite of operating rooms is furnished with the latest pattern of sterilizing and operating fixtures and instruments. One operating room is reserved for aseptic cases.

The charges are moderate. Luxurious rooms are furnished for those who wish such accommodations. Efficient graduate nurses are constantly in attendance.

For further information, address REV. O. WILKE, Superintendent of Hospital, or,

DR. O. C. WELBOURN, Medical Director,

Room 303 Grant Building.





## ***Medical Batteries*** **AT WHOLESALE PRICES**

**ELEGANT WALL CABINET** for Direct, Alternating Current or Cells. Gives Galvanic, Faradic and Sinusoidal Current, Caution and Light.

**VIBRO MASSAGE MACHINES**, with Electric Battery. Best in the world.

**MARBLE GALVANIC and FARADIC WALL PLATE**, only \$18.00.

**FARADIC BATTERIES** from \$3.75 up.

**GALVANIC and CAUTERY BATTERIES** from \$8.00 up.

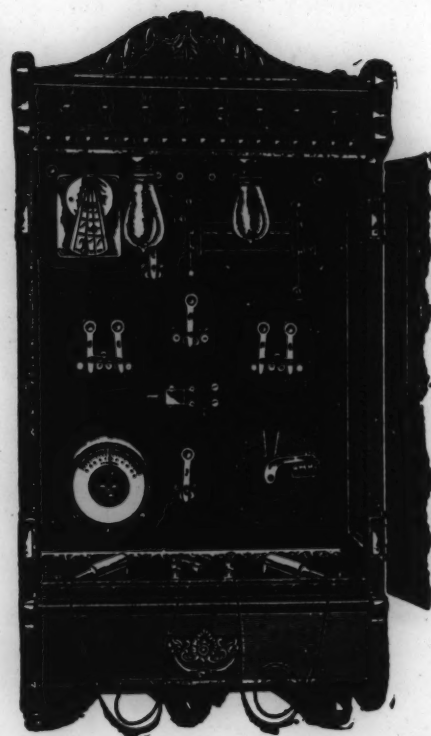
SEND FOR OUR WHOLESALE PRICE LIST OF	
STATIC MACHINES	SURGICAL INSTRUMENTS
X RAY MACHINES	ELECTRODES
OPERATING CHAIRS	TRUSSES
NEBULIZERS	SUPPORTERS

**MONEY BACK IF YOU ARE NOT SATISFIED**

**Western Surgical Instrument House**

**SALESROOM 69-71 DEARBORN ST.**  
**FACTORY 59TH AND WALLACE STS.**

**CHICAGO, ILL.**





# DOCTORS

SHOULD ALL TAKE A COURSE IN

## CHEMISTRY AND PHARMACY

IN ORDER TO KEEP UP WITH THE TIMES.

Easy, Simple, Complete, Practical, Cheap, Quick, and by mail.

## STUDENTS

will find it of great value before attending lectures. Do you want to be a Qualified and Practical Druggist as well as a physician?

SAMPLE LECTURES FREE.

☞ Our Graduates can Pass any Pharmacy Board. ☞

PRACTICAL DRUGGIST INSTITUTE. 120 Fulton St., New York

---

## SURGICAL :: INSTRUMENTS



SUPPLIES,  
SATCHELS,  
MEDICINE CASES,  
POCKET CASES,

And a General Line of SURGICAL  
INSTRUMENTS.

---

*GYNAECOLOGICAL INSTRUMENTS A SPECIALTY*

Sole Agent for the ALLISON OPERATING TABLES.

**N. W. MALLERY,** Rooms 111 and 112 Crocker Building  
(610 MARKET STREET)

Tel. Main 612

San Francisco, Cal.



# THE PRACTICAL MEDICINE

A MONTHLY JOURNAL OF GREAT PRACTICAL VALUE AND INTEREST  
TO EVERY MEDICAL MAN.

FOREIGN SUBSCRIPTION SIX SHILLINGS PER ANNUM.

NOW OCCUPIES A PROMINENT PLACE IN THE FRONT RANK OF  
MEDICAL JOURNALS IN INDIA. THE ARTICLES ARE SHORT,  
POINTED AND PRACTICAL, ESPECIALLY SUITED TO  
THE BUSY DOCTOR.

Best medium for the announcement of books, instruments, and phar-  
maceutical specialties and other articles generally required  
by the profession.

## LOWEST NET ADVERTISING RATES.

SPACE	1 MONTH	3 MONTHS	6 MONTHS	12 MONTHS
1 page	£2 10s.	£6 18s.	£12 8s.	£24
$\frac{1}{2}$ "	£1 10s.	£3 16s.	£ 6 18s.	£12 8s.
$\frac{1}{4}$ "	14s.	£2	£ 3 16s.	£ 7 4s.
$\frac{1}{8}$ "	8s.	£1 2s.	£ 2	£ 3 12s.

PAYABLE IN ADVANCE.

Address—

MANAGER,  
"PRACTICAL MEDICINE,"  
Egerton Street, **DELHI**, INDIA.



# AGENTS A GOOD INCOME WANTED CAN BE SECURED

by an  
English  
Manufacturer  
for the  
New Diamond  
Gold Pen

Whole or spare time—Male or female.

Good wages and constant employment can be earned by intelligent agents.

The New Diamond Gold Pen superior to the best Gold Nibs cost ONE TENTH only. Points finished like Diamond Shape.

One Nib will last for many Months

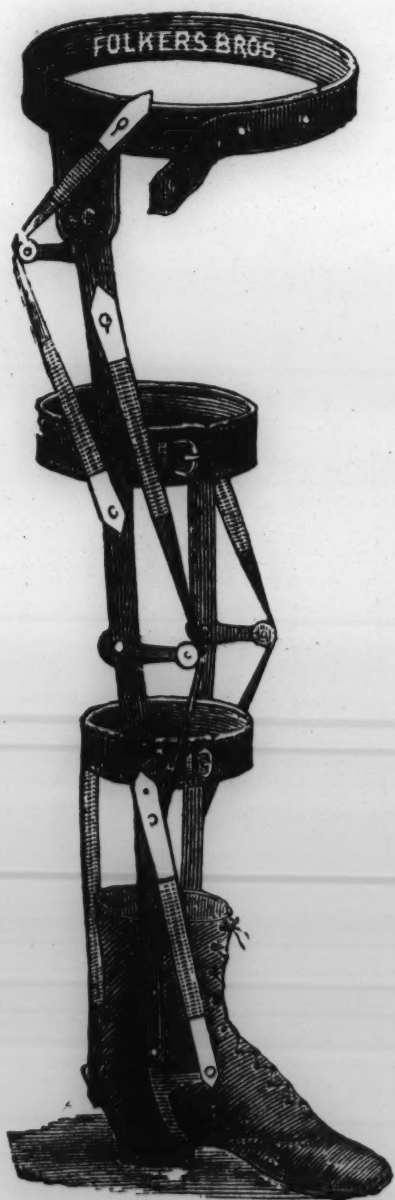
Advantages of the new Diamond Pen:  
Beautiful touch—glide smoothly over the paper—make writing a pleasure—improve in use—durable—non-corrodible—one nib will last longer than grosses of steel nibs.

everywhere.

Every man, woman, or child should use the new Diamond Pen.  
To start at once send 40 cents (stamps will do) for Agents' Sample Box, or one Dollar for large size Sample Box post free by return to all parts of the world with particulars of the best paying agency.

STANDARD CORPORATION,  
DIAMOND PEN WORKS,  
49 Newgate Street, London, E.C.  
ENGLAND.

Postage for letter, 5 cents.



TELEPHONE BUSH 431.

G. A. W. FOLKERS

SUCCESSOR TO

J. H. A. FOLKERS AND BRO.

IMPORTERS OF

**SURGICAL INSTRUMENTS**

**Static Machines & X-Ray Apparatus**

MANUFACTURERS OF

TRUSSES and APPARATUS for DEFORMITIES, Etc.

ELASTIC STOCKINGS and BELTS

LADY ATTENDANT FOR LADIES.

332 POST STREET  
SAN FRANCISCO.



# PASSIFLORA

A Physician of 30 years' experience says: I have used DANIEL'S CONCT. TINCT. PASSIFLORA INCARNATA to Quiet Nervousness, Insomnia, and in Convalescence after Typhoid Fever. I have also given it to Women suffering from Endometritis and Irritation from Ovarian Trouble. In cases of Insomnia due to alcoholic excess, I find it induces normal sleep, and where a calmative is needed PASSIFLORA is excellent.

*Write for Literature  
Sample Supplied, Physician  
Paying Express Charges*

Laboratory of  
John B. Daniel, Atlanta, Ga.

CHEMICAL

DAD

NEURILLA

TRANQUILIZES THE NERVES

TEASPOONFUL REPEATED AS NECESSARY  
NO BAD EFFECTS

NEWYORK — PARIS

88

# PAPER

This JOURNAL is printed on our "ALBION BOOK."

We carry a full stock of all kinds. **Powder Papers** a specialty. Samples and quotations promptly given.....

BONESTELL & CO., 401-403 Sansome St., San Francisco.  
500-508 Sacramento St.,



# Collinsonia Canadensis.

For some affections of the throat, Collinsonia is certainly a specific. It is such in so-called "minister's sore throat," or the laryngitis due to an over use of the speech organs. It is also efficient in chronic laryngitis, with change of voice, and in chronic bronchitis, when there is *irritation, congestion, and sense of constriction*. When these symptoms are present, Collinsonia has no superior as a remedy in certain forms of relaxed uvula, in pharyngitis, in hoarseness, in croup, and in whooping cough, as well as in ordinary cough of nervous origin. For these various uses it is administered in fair sized doses, as

R. Specific Collinsonia, - - - - - f  $\frac{3}{4}$  j.  
Simple syrup, - - - - - q. s. ad f  $\frac{3}{4}$  iv.  
M. Sig. Teaspoonful four or five times a day.

For its general tonic effect upon the digestive tract, Collinsonia is a remedy of no mean value in functional gastric troubles, atonic dyspepsia, constipation, anemia, chlorosis etc. However, next to its specific action in throat affections, we desire to suggest the use of Collinsonia in rectal diseases, and in troubles about the anal outlet. As an internal medicament in the treatment of hemorrhoids, Collinsonia has no equal, if the cases be well chosen. There is *irritation, constriction, congestion*, a feeling as though a foreign body of no small size were lodged within the bowel. There is heat, burning, and perhaps hemorrhage. It is also very efficient as an internal remedy in the relief of the disturbances due to rectal pockets, papillæ, ulcers, spasmodic stricture, etc. It is not surpassed by any remedy in these troubles, unless it be by operative measures. The latter are more speedy, but hardly more certain. The same is true of Collinsonia in certain cases of spasmodic contraction of the sphincter ani, and in general prostatitis.

As adjunct remedies to be used in combination or in alternation with Collinsonia, we should consider specific ipecac, powdered rhubarb, and either the second or third decimal trituration of sulphur, or the second trituration of podophyllin. Collinsonia should not be forgotten in reflex troubles due to rectal irritation. In this line we mention reflex cough, asthma, chorea, headache of a dull, frontal variety, and reflex cardiac affections. It is frequently a remedy in dysentery, and in cholera infantum, when there is much tenesmus, with *irritation, constriction and congestion*.

Collinsonia is highly recommended in certain functional urinary troubles, when the symptoms calling for it are prominent. It allays the irritation and gives speedy relief. Many times it is the remedy in incontinence of urine, in urethral or vesical hyperesthesia, and for minor gonorrheal disturbances. Because of this action it has been suggested as a remedy in gravel, calculus, in dropsy, and in varicocele. It is also a remedy for hemorrhoids, swollen genitals, pruritus vulva and ani of the pregnant female. By some it is recommended in certain cases of dysmenorrhea, amenorrhea, leucorrhea, prolapsus, etc.

The symptoms—*irritation, congestion, and constriction*—presenting in any case of whatever name or nature, call for Collinsonia. For use in rectal, anal, and genito-urinary diseases, the dose does not need to be as large as recommended above. Ten drops of the Specific Medicine to four ounces of water, and a teaspoonful of the mixture every hour or two, is sufficient for most purposes in these lines. Larger doses, however, are not followed by deleterious effects. Remember, that when *irritation, congestion, and constriction* are present, Collinsonia is the remedy, call the disease what you may.—*Editorial from the Eclectic Medical Journal*.

The above editorial concerns one of the most important Eclectic remedies. It is the subject of our sixteen-page descriptive Drug Study No. VII, which will be mailed free on application.—*Lloyd Brothers, Cincinnati, Ohio*.



The doctor is near sighted and forgetful, but he is going to receive an impression that will cause him to remember these remedies.

### Olive Oil Food Medicines

Indicated in asthenic conditions of all ages and both sexes

MADE ONLY BY

**A. V. STUART Co.**

San Jose, Cal.

Literature on application.



## **SANMETTO** FOR GENITO-URINARY DISEASES.

A Scientific Blending of True Santal and Saw Palmetto In a Pleasant Aromatic Vehicle.

A Vitalizing Tonic to the Reproductive System.

SPECIALLY VALUABLE IN  
PROSTATIC TROUBLES OF OLD MEN—IRRITABLE BLADDER—  
CYSTITIS—URETHRITIS—PRE-SENILITY.

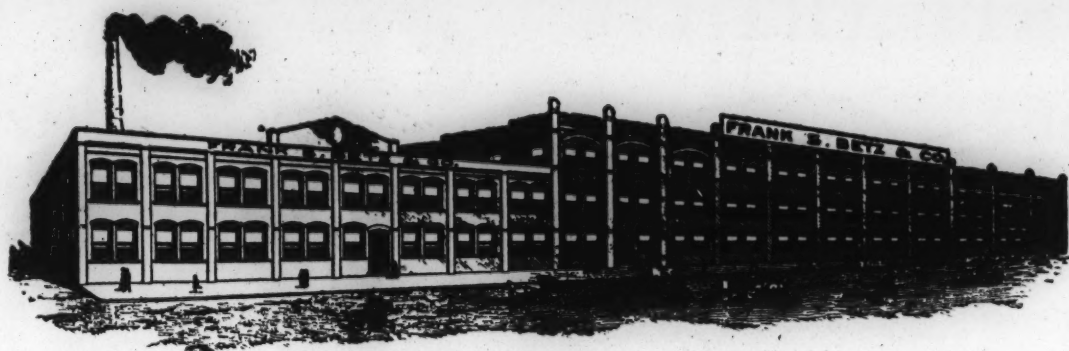
DOSE:—One Teaspoonful Four Times a Day.

OD CHEM. CO., NEW YORK.



# \$2500 TO \$10,000 YEARLY

## WE MAKE OUR GOODS IN OUR OWN PLANT



Nine years ago my capital was \$25. To-day we do not owe \$1 and have more money invested than any three of the largest concerns in the U. S. or Canada in this line. Why is it? Our goods are right, Prices O.K. We guarantee everything. We save the doctor over half on everything he buys. We make thousands of articles, and sell to the doctor at the same price small makers sell to the small instrument dealers. Have made over 2900 Static and X-Ray Machines, 23 now in San Francisco and Oakland, 211 in use in the state of Illinois.

Have fitted up over 2500 doctor's offices at an expense of from \$350 to \$3000. Our sales this year will go over One Million and a Half Dollars. You cannot afford to fit up an office unless you first consult us.

\$500 will make you from \$2500 to \$10,000 yearly. \$50 will fit you up to treat Diseases of Women and Rectal Troubles by the Latest Methods. Would you invest \$50 if you could get your money back if it did not increase your practice over \$1,000 yearly over and above what you make now? Ask any questions and write me personally and I will take the matter up with you and show you how you can increase your income. See next page.

**FRANK S. BETZ,**


90 Wabash Avenue

Chicago, Illinois.



Below find a few of our prices. Our new Bulletin will give prices never before dreamed of.

\$200	Static Machines.....	\$100.00	Forceps, Senn's Artery.....	.45
\$500	" ".....	200.00	" Tate's ".....	.30
\$ 75	Nebulizers.....	50.00	" Kelley (Baltimore)... ..	.45
\$ 60	Batteries.....	30.00	" " 5½ inch.....	.40
\$ 90	Operating Chair.....	35.00	" " 7½ ".....	.70
\$ 45	" Table.....	25.00	" Hysterectomy, Jewett.....	1.10
\$ 65	High Frequency.....	25.00	" Placenta, Bond's.....	.95
\$ 50	Diasolenic Outfit.....	25.00	" Phimosis, Skillern... ..	.70
\$ 45	Dermatologists Outfit.....	21.00	" Chalazion, Ayer's.....	.70
\$ 20	Manikin 30 fold.....	10.00	" Trachoma, Knapp's	
\$ 2	Trusses.....	.50	Roller.....	.75
\$ 5	Silk Supporters.....	1.50	" Entropium, Desmar's.....	1.00
\$ 10	Office Tables.....	5.00	" Throat, Buck's.....	.70
\$ 18	Double Irrigators.....	8.00	" Tongue, Hauze.....	1.00
\$ 20	Intubation Sets.....	7.75	" Uterine, Bozeman... ..	.70
\$ 12	Double Lever Pumps.....	6.75	" Volsellum, 9 in., str..	.80
\$125	Microscopes.....	77.50	" Tenaculum Wylie's..	.90
\$ 50	".....	28.50	Gag, Denhart, steel.....	.90
\$ 12	Emergency Bags.....	6.00	Needle Holder, Mathew's..	.70
\$ 35	Invalid Rolling Chairs.....	18.00	Urine Test Case.....	3.60
\$ 1.50	Vaginal Speculums.....	.50	Hydrometer for Static.....	1.25
\$ 2	Uterine Scissors.....	.65	Saline Outfit, in case.....	1.10
\$ 2	Metal Ear Syringes.....	.75	Bullet Probe, Fluher's.....	.40
\$ 1.25	Thermometers.....	.40	Retractors, Abdominal.....	.50
\$ 15	Centrifuge.....	6.75	Ophthalmoscope, 19 lens....	4.50
\$ 35	Water Motors.....	17.50	Pelvimeter, Collyer's.....	1.00
	Electric Motors all kinds		Perforators, Simpson's.....	1.10
	Applicators, 8 for.....	.25	Scissors, Umbilical.....	.45
	Murphy Buttons, 3 for.....	2.00	Van Buren Sounds, steel....	.20
	Soft Rubber Catheters, 3....	.40	Uterine Sound, Sim's.....	.15
	Female Catheter, Metal.....	.15	Speculum, Ear, Gruber's set	.35
	Male, " ".....	.25	Speculum, Rectal, Pratt's... ..	.85
	Eustachian Catheters, Metal	.15	" Vaginal, Taylor's.....	.50
	Drill, Hamilton's, Bone.....	1.75	Trephine, Galt's.....	1.10
	Swartz Ear Chisel.....	.30	Tourniquet and Clasp.....	.15
	Clamps, Ferguson, 8 in., Pile	1.00	Syringe, P.D. style, Hypo-	
	Dilators, Palmer's Uterine..	1.00	dermic.....	.25
	" Goodell's ".....	2.75	Tonsillotome, Billing's.....	3.75
	Curettes Gottstein Adenoid..	.90	Rubber Operating Gloves... ..	.60
	Kelley Cushion 20x44.....	2.20	Razor, fine, for shaving.....	1.00
	Depressor, Pynchon's tongue	.50	Kelley's Leg Holders.....	.80
	Cautery Knives, 3 for.....	1.00	24 Surgeon's Needles.....	.45
	" Battery.....	15.00	Potaine's Aspirator, in case..	4.40
	Forceps, Bone, Liston's.....	1.40	12 Books Litmus Paper.....	.25
	" " Tieman's.....	.75	Glass Eyes.....	1.00
	" Polypus cutting,		X-Ray Tubes.....	5.50
	Heyman.....	1.00		

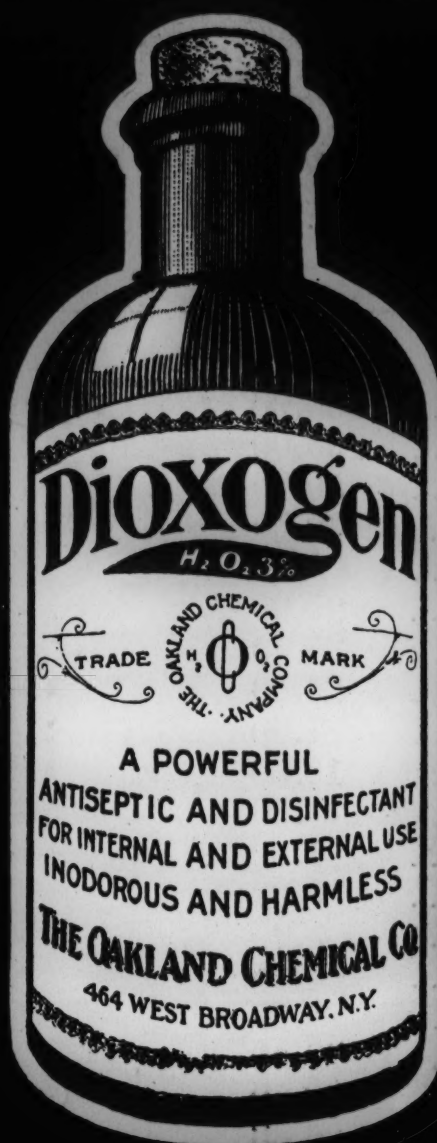
 POSTAL GETS BULLETIN

From S. BETZ & Co.,

CHICAGO, ILL.



NON-TOXIC  
NON-IRRITATING  
HARMLESS



ANTISEPTIC  
DISINFECTANT  
DEODORANT

Dioxogen is a medicinal solution of  $H_2O_2$  with a well established reputation for purity and reliability. It has for many years been known as "the kind that keeps" and is always specified by the careful prescriber.

# Dioxogen

$H_2O_2$  3%

It is a powerful germicide, but is harmless to healthy tissues; destroys pus and septic materials; has a "mechanical" action which dislodges dirt from accidental wounds. Of indispensable value in modern minor surgery. Adhered dressings easily and painlessly removed by its use.

SHOULD ALWAYS BE CARRIED IN THE EMERGENCY BAG.

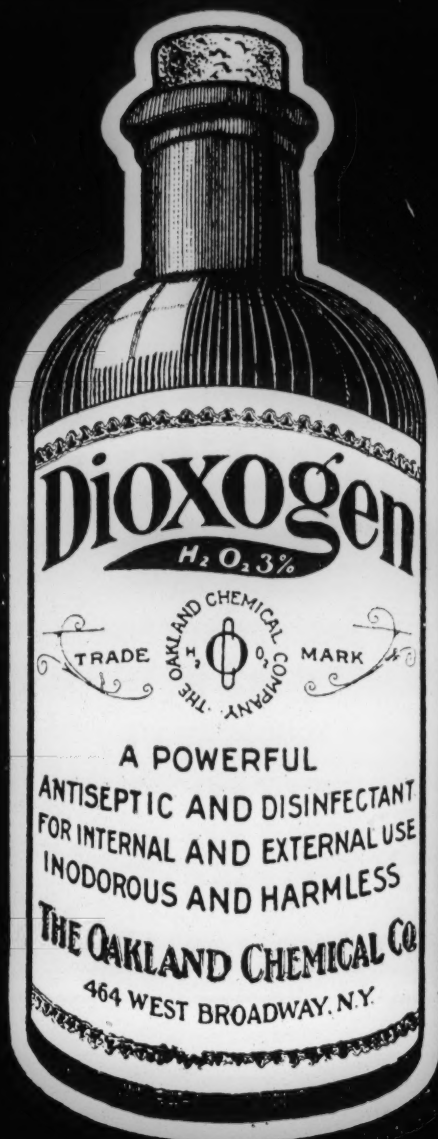
THE OAKLAND CHEMICAL CO. 464 WEST BROADWAY NEW YORK CITY.







NON-TOXIC  
NON-IRRITATING  
HARMLESS



ANTISEPTIC  
DISINFECTANT  
DEODORANT

Dioxogen is a medicinal solution of  $H_2O_2$  with a well established reputation for purity and reliability. It has for many years been known as "the kind that keeps" and is always specified by the careful prescriber.

# Dioxogen

$H_2O_2$  3%

It is a powerful germicide, but is harmless to healthy tissues; destroys pus and septic materials; has a "mechanical" action which dislodges dirt from accidental wounds. Of indispensable value in modern minor surgery. Adhered dressings easily and painlessly removed by its use.

SHOULD ALWAYS BE CARRIED IN THE EMERGENCY BAG.

THE OAKLAND CHEMICAL CO. 464 WEST BROADWAY NEW YORK CITY.

Retake of Pre







